

U.S. Public Health Service

Treasury Department.

Marine-Hospital Service.

BULLETINS

OF

THE PUBLIC HEALTH,

ISSUED BY THE

SUPERVISING SURGEON-GENERAL

UNDER THE

NATIONAL QUARANTINE ACT OF APRIL 29, 1878.

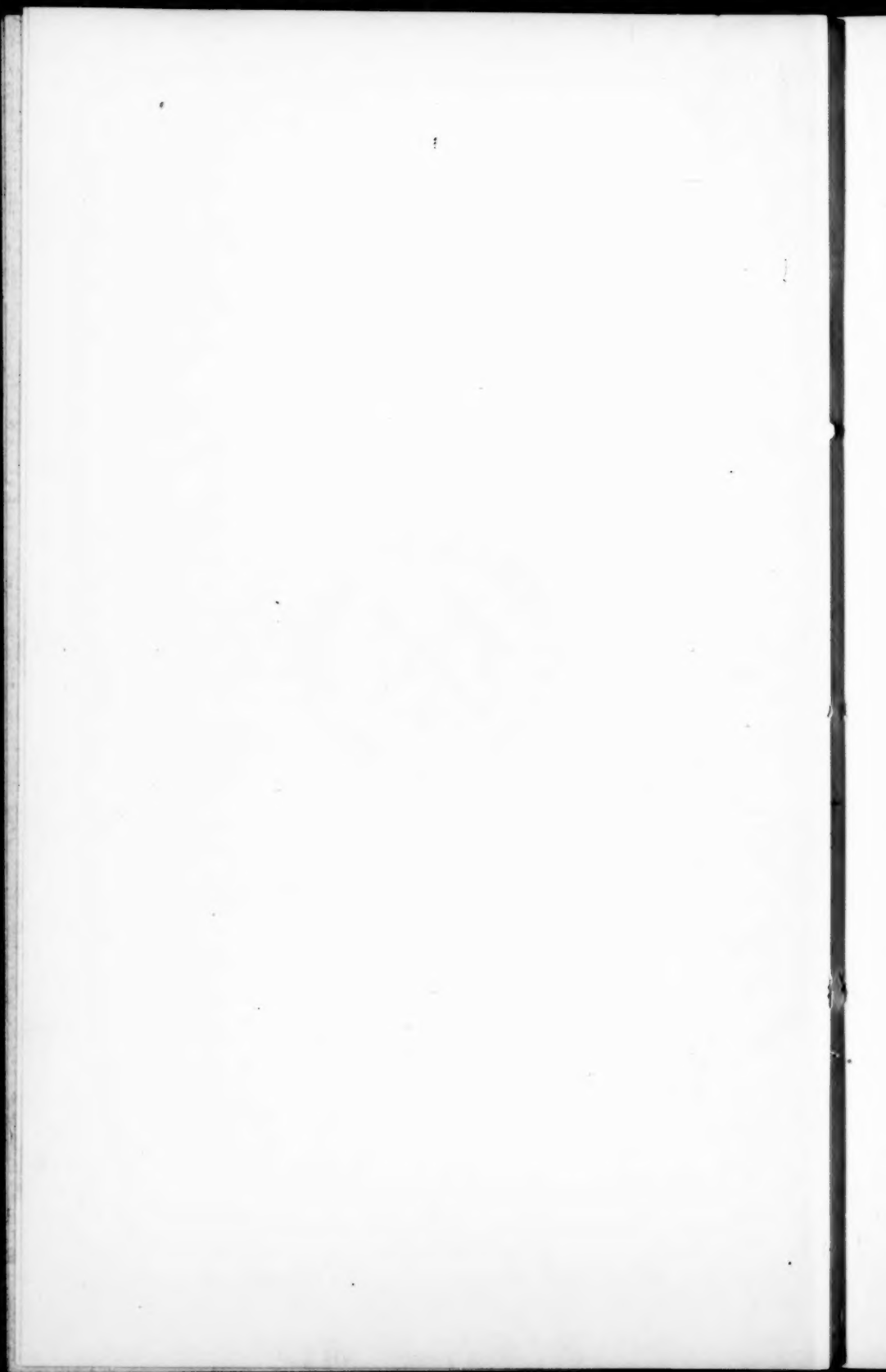


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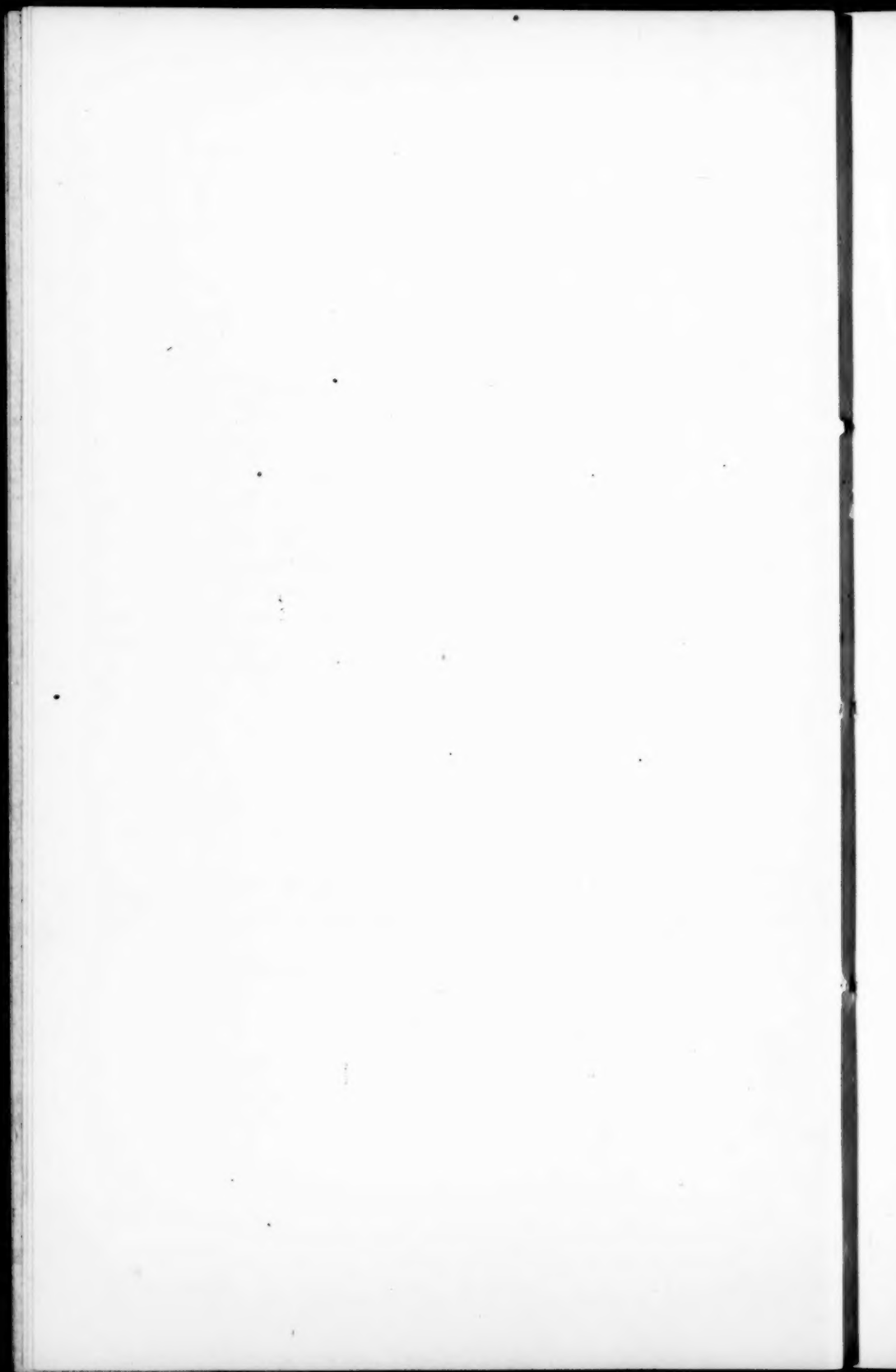


TREASURY DEPARTMENT,
Document No. 74.
Marine-Hospital Service.

TREASURY DEPARTMENT,
OFFICE SUPERVISING SURGEON-GENERAL,
UNITED STATES MARINE-HOSPITAL SERVICE,
Washington, December 7, 1880.

The "Bulletins of the Public Health," published in accordance with the National Quarantine Act of April 29, 1878, were issued from this office weekly, from July 13, 1878, to May 24, 1879, inclusive, compiled from the reports received during the periods in which the recent epidemics of the plague in Russia and yellow-fever in the United States prevailed, the latter by far the most disastrous epidemic of yellow-fever that has yet visited America. These reports were originally published on separate sheets by the papyrographic process, which was ill adapted for permanent record; and it was impracticable that any considerable number could be furnished to those desiring them. In order, therefore, that there may be on file in each marine hospital the complete series in a permanent form, it has been decided, with the approval of the Secretary of the Treasury, to republish the "Bulletins" in a shape better adapted for preservation.

JOHN B. HAMILTON,
Supervising Surgeon-General, M.-H. S.



BULLETINS.

No. 1.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, July 13, 1878.

The following information is furnished by the Surgeon-General of the Marine-Hospital Service to State and municipal officers of health, &c., in accordance with the requirements of the National Quarantine act:

Havana, Cuba.—From 20 to 34 deaths from yellow-fever, and more from small-pox, are now occurring weekly in the city of Havana.

Cardenas and Sagua la Grande, Cuba.—Good health in bay and city.

Matanzas, Cuba.—The captain and four of the crew of the bark "Marie Donau" were attacked with yellow-fever on the 3d instant, in the harbor of Matanzas. Only one other case of fever has occurred in the shipping of that port. Sporadic cases are reported in the city, but the disease is of a mild character.

Key West, Fla.—Two cases of yellow-fever have occurred in the harbor of Key West, one on the Norwegian ship "Marie Frederike," and one on the Spanish bark "Doña Talefora." The city is reported healthy.

Two of the British vessels which recently conveyed native Indian troops to Malta, had cholera on board during the passage from India. On one of the vessels nine cases and four deaths, and on the other two deaths, occurred before the vessel passed the Suez canal. The vessels were allowed to pass the canal without detention, though it is customary to send a vessel, on which a single case of cholera has occurred during the voyage, back to Thor, 120 miles, there to remain two weeks or more in quarantine.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

No. 2.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, D. C., July 20, 1878.

Abstract of Sanitary Reports received during the past week under the National Quarantine Act.

Havana.—During the week ended July 6, 93 deaths from yellow-fever, and six from small-pox, occurred in Havana, which shows a large

increase of the former disease, and a corresponding decrease of the latter.

Matanzas.—Advices up to the 12th instant, show an increase of yellow-fever. The disease is reported to have spread to nearly all the vessels in port, though few deaths have occurred.

Key West.—Two additional cases of yellow-fever have occurred in the city—one fatal—making five cases in all up to the 10th instant. The first three cases were in the shipping from Havana; the last two in no way connected with the shipping. City of Key West reported remarkably healthy this season, and no fears are entertained there of an epidemic.

Brooklyn.—Eight cases of yellow-fever occurred at the Brooklyn navy-yard, three with fatal result. The first case was admitted to hospital July 12, and the last July 18.

Reports received from other places indicate good health.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

No. 3.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, July 27, 1878.

*Abstract of Sanitary Reports received during the past week, under the
National Quarantine Act.*

New Orleans.—About the 12th instant, cases of yellow-fever began to occur in New Orleans; at first they were at one focus of infection only, but others soon appeared at different points, and up to yesterday evening 37 cases and 17 deaths had been reported to the State board of health. So far, the board have been unable to trace the outbreak to foreign source. Carbolic-acid disinfection is being vigorously carried out at all infected points, and the remarkable success which has attended the efforts of the board in this direction in the past few years, gives hope of preventing the outbreak from assuming epidemic proportions. Three or four persons at New Orleans have died of yellow-fever, at points above that place on the Mississippi.

Brooklyn.—No new cases at navy-yard since last Saturday's report.

Key West.—From 10th instant to noon to-day, six new cases of yellow-fever in the harbor, and three in the city have occurred.

Havana.—During week ended July 13, there were 97 deaths from yellow-fever and 22 from small-pox.

Matanzas.—Advices to 19th show increased cases and increased ratio of deaths.

Japan.—Occasional cases of *cholera* during winter and spring, to June 19, 1878, at Yokohama and vicinity, show the poison of the disease has survived the winter. The epidemic of last September, October, and November, extended to all parts of the empire, with a mortality of 7,967, out of a total of 13,710 cases; or, 581 deaths to 1,000 cases. No means yet instituted in Japan to prevent importation of the disease from China, where it exists, and where the famine furnishes most favorable conditions for its reappearance in a more malignant form.*

Calcutta.—Twenty-two deaths from *cholera* during week ended May 25.

Bombay.—Twenty-nine deaths from *cholera* during week ended May 28.

Reports received from other places indicate good health.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 4.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, August 3, 1878.

Abstract of Sanitary Reports received during the week ended August 3, 1878, under the National Quarantine Act.

New Orleans.—Since report last week, 158 cases yellow-fever and 36 deaths have occurred, making in all 195 cases and 53 deaths to yesterday evening. There are now four principal points of infection, and these spreading, but the board of health hope to control it.

One passenger landed Monday at Vicksburgh, has since died of yellow-fever; on Tuesday, one case taken from hotel to hospital at Cincinnati, with same disease—both from New Orleans *en route* for North.

Key West.—No new cases yellow-fever, four days to yesterday noon. No cases in port; two at U. S. marine hospital convalescent.

Quarantine Stations.—Many vessels arriving at quarantine stations on Atlantic, from Cuba, bring cases of yellow-fever—a common yearly experience.

Havana.—One hundred and twenty-nine deaths from yellow-fever and 13 from small-pox, week ended July 30.

Matanzas.—No abatement of yellow-fever or ratio of deaths, week ended July 26.

Calcutta.—Fourteen deaths from *cholera*, week ended June 1.

* Dr. D. B. Simmons, Chairman Health Board, Yokohama, &c.

Bombay.—Thirty-three deaths from cholera during two weeks ended June 11.

Constantinople.—Bulk of Russian army, encamped on unhealthy low-lands, has removed to healthier camping-grounds, and most of the refugees in the city have gone to Asia Minor and Syria—about 80,000 remaining—since which, the typhus, small-pox, measles, scarlet, and enteric-fevers, which prevailed so extensively near close of war and since cessation of hostilities, have greatly diminished. (July 12.)

The epizootic prevails extensively amongst the cattle of Asiatic and European Turkey.

Reports from other places indicate good health.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 5.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, August 10, 1878.

Abstract of Sanitary Reports received during the past week under the National Quarantine Act.

Port Eads.—Yellow-fever appeared at Port Eads, mouth of the Mississippi, on the 5th instant. Thirteen cases to yesterday noon; no deaths.

New Orleans.—Since last report, 326 cases yellow-fever and 65 deaths, making 431 cases and 118 deaths to yesterday noon.

Cincinnati.—There have been only two cases of yellow-fever (one previously reported,) both from New Orleans; one fatal.

Memphis.—A young man arrived July 30 from New Orleans, and died of yellow-fever August 3.

Caledonia, Ill.—A lady who died of yellow-fever on board steamer "Golden Crown," from New Orleans, was buried here August 4.

New Albany, Ind.—Two deck-hands landed July 25, supposed to have yellow-fever. Surgeon Long, of this Service, upon investigation, reports that they did not have that disease.

Vicksburgh.—One case of yellow-fever arrived on a steamer from Cairo, (originally from New Orleans;) died August 9.

Key West.—No new cases yellow-fever past week to noon to-day.

Havana.—Two hundred and thirty-one deaths from yellow-fever, 21 from small-pox, two weeks to August 3.

Matanzas.—No cases yellow-fever July 26 to 29, but four new cases

reported on 30th, in bay; others have since occurred daily to August 2, date of advices.

Cardenas.—Yellow-fever in city, but not yet among shipping.

Sagua la Grande, Cuba.—One fatal case yellow-fever in shipping.

Bombay.—Twenty-six deaths from cholera, week ended June 18.

Malta.—Cholera on British troop-ships from India was brought under control by authorities, and disease did not lodge in Malta; advices to July 18.

Reports from other places indicate good health.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 6.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, August 17, 1878.

Abstract of Sanitary Reports received during past week under the National Quarantine Act.

New Orleans.—Since last report, 471 cases yellow-fever and 121 deaths, making a total of 902 cases and 239 deaths, of which 108 cases and 29 deaths occurred during twenty-four hours to noon yesterday.

Port Eads.—Thirty-three cases of yellow-fever and five deaths during the week, to yesterday evening.

Grenada, Miss.—The first case of yellow-fever occurred July 25. To noon yesterday there had been 125 cases and 47 deaths.

Mobile.—One death from yellow-fever yesterday—a colored woman who, it is reported, had been on an excursion to Biloxi, Miss., July 24.

Cincinnati.—Since last report, a young woman living in a house where baggage believed to be from New Orleans was stored, died of a fever resembling yellow-fever. Another case of fever of similar character has since developed in the same neighborhood. Steamer "John D. Porter," from New Orleans, had four deaths from yellow-fever before arriving at Cincinnati, which city she passed on Friday, bound for Pittsburgh, with several cases on board. One man who left the "John D. Porter" at Louisville proceeded to Cincinnati by rail, where he was sent to hospital on the 13th instant with fever. The steamer "Golden Rule" passed Cairo yesterday evening for Cincinnati with two cases yellow-fever on board. Two deaths occurred on board that vessel Thursday.

Several people from New Orleans and Port Eads have sickened or

died of yellow-fever on their journey northward; one case at Covington, Ky., one at Cairo, and three deaths at Saint Louis.

Memphis.—The first case of yellow-fever occurred August 13, in the person of a woman, whose eating-house was frequented by river-boatmen. The disease has spread rapidly, but has not yet assumed a malignant type.

Vicksburgh.—Yellow-fever has appeared since last report; the first death occurred August 12. Advices to noon to-day report the outbreak of the disease near river front within last fifteen hours, from whence it is spreading rapidly.

Havana.—Ninety-nine deaths from yellow-fever and nine from small-pox during week ended August 10.

Cardenas and Sagua la Grande, Cuba.—No cases of yellow-fever during week ended August 9.

Matanzas.—Decrease in yellow-fever, week ended August 9.

Calcutta.—Ten deaths from cholera, week ended June 15.

Bombay.—Twenty-five deaths from cholera, week ended June 25.

Reports from other places indicate good health.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

No. 7.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, August 24, 1878.

Abstract of Sanitary Reports received during the past week, under the National Quarantine Act.

New Orleans.—During the week ended yesterday noon, there were 771 cases of yellow-fever and 295 deaths, making in all 1,673 cases and 534 deaths. During the twenty-four hours to noon yesterday, there were 123 new cases and 40 deaths.

Vicksburgh.—At least 400 cases yellow-fever from date of commencement, August 12, to yesterday evening, and 69 deaths; 20 deaths during last twenty-four hours. Dr. Booth, in charge of the Marine-Hospital Service at that port, telegraphs: "I am sick; impossible to procure accurate data."

Memphis.—One hundred and forty-four cases yellow-fever and 53 deaths during six days to Friday evening.

Canton, Miss.—First case of yellow-fever occurred at Canton on August 1. To yesterday evening, there were 18 cases and eight deaths.

Port Gibson, Miss.—First case of yellow-fever, originating in Port Gibson, occurred August 3, resulting in death August 8. The disease began to spread August 14; 118 cases and nine deaths to yesterday morning.

Cincinnati.—To yesterday evening, no more cases yellow-fever had developed at Cincinnati since the two mentioned in the last report. The engineer of the steamer "Golden Rule" was admitted to hospital the 22d instant, with yellow-fever, and also one other case, probably yellow-fever, from Memphis.

Morgan City, La.—One case of yellow-fever, August 21; patient from New Orleans.

Ocean Springs, Miss.—Three cases yellow-fever and one death, all imported.

Saint Louis.—Four refugees died of yellow-fever at Saint Louis during past week.

Louisville.—Four river-boatmen, suffering from yellow-fever, are under treatment in an improvised hospital on the U. S. marine-hospital grounds, admitted from steamers "John D. Porter," "Sunflower," "Belle," and "Golden Crown," on the 17th and 18th instant.

Mobile.—The case reported as yellow-fever, August 16, is now officially announced as undoubtedly a mistake. Despatches to 23d instant report good health.

Key West.—No yellow-fever for three weeks to yesterday evening.

Grenada, Miss.—So many of remaining population stricken with the fever that definite information of number of cases and deaths could not be obtained.

Havana.—Ninety deaths from yellow-fever and six from small-pox, week ended August 17.

Matanzas.—Decreased cases yellow-fever; only five American vessels in port August 16, and all of them have either had or were having cases of yellow-fever on board.

Cardenas and Sagua la Grande, Cuba.—No yellow-fever; advices to 16th instant.

Bombay.—Thirty-three deaths from cholera and 15 from small-pox, week ended July 2.

Calcutta.—Nineteen deaths from cholera and 36 from small-pox, week ended June 22.

Reports from other places indicate good health.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.

*Washington, August 31, 1878.**Abstract of Sanitary Reports received during past week under the National Quarantine Act.*

New Orleans.—During the week ended yesterday noon, there were 1,204 cases of yellow-fever and 333 deaths, making in all 2,877 cases and 867 deaths. During the twenty-four hours to noon yesterday, there were 169 new cases and 59 deaths.

Vicksburgh.—During the week ended yesterday evening, there were 116 deaths from yellow-fever making 185 deaths in all, 17 of which occurred within the last twenty-four hours. It is estimated that 800 cases of fever have occurred to date, about half of these in the past week, and 59 new cases in the last twenty-four hours. Dr. Booth, in charge of the patients of the Marine-Hospital Service, died the 27th.

Memphis.—Seven hundred and twenty-one cases of yellow-fever and 241 deaths for the week ended August 29.

Morgan City, La.—The refugee, reported last week sick of yellow-fever, died August 23. Seven other cases have since occurred, and four deaths in all to yesterday noon.

Bay Saint Louis, La.—One death from yellow-fever occurred the 18th instant.

Ocean Springs, Miss.—Three cases of yellow-fever occurred yesterday morning. No deaths during the week.

Water Valley, Miss.—Two cases yellow-fever, both refugees; the first occurred on the 12th and is convalescent, the second on the 26th, which terminated fatally yesterday.

Holly Springs, Miss.—Seven cases of yellow-fever and two deaths to yesterday evening; all refugees. Good health in the city and the United States military camp.

Leighton, Ala.—A refugee from Memphis arrived August 18, and died of yellow-fever August 24.

Saint Louis.—Eight cases of yellow-fever during the week and two deaths; all refugees. At Quarantine, below Saint Louis, there were six new cases and one death, besides 20 doubtful cases admitted during the forty-eight hours ended yesterday evening.

Cairo, Ill.—A river boatman from Memphis died of yellow-fever August 24.

Louisville.—Since last report 11 refugees and boatmen have been attacked with yellow-fever after arrival in Louisville, four of whom have died.

Cincinnati.—Nine cases of yellow-fever five from steamboat "Golden Rule," and four deaths have occurred since last report. Two of the deaths were the cases reported last week. All came from infected places South.

Wheeling, W. Va.—Case reported through the press on the 28th, officially, pronounced *not* yellow-fever.

Pittsburgh, Pa.—A deck-hand on the steamboat "John D. Porter" arrived August 26, and died next day of yellow-fever.

Philadelphia.—Two cases of probable yellow-fever occurred August 24, the persons having arrived from Vicksburgh a few hours previously. They were immediately removed to the hospital for infectious diseases.

Havana.—Seventy-one deaths from yellow-fever and six from small-pox during week ended August 26.

Clifton, England.—The United States consul at Bristol, England, reports a severe outbreak of enteric (typhoid) fever at Clifton, near that place, which had been traced to the use of milk from a farm where the pump is five yards from the privy-vault. Previous to the outbreak a young lady had been carried to the farm-house to complete her convalescence from enteric-fever. A wholesome lesson is given in the action of the medical officer of health, who notified the farmer that if he let any member of his family use the contaminated pump-water and disease arose from it, or if he sold any milk and disease arose from it, he would lay information against him as having committed manslaughter.

Trieste, Austria.—Some cases of the *plague* have occurred at Trieste; advices to August 17.

No reliable information from *Key West*, and no official reports obtained from *Grenada, Canton*, and *Port Gibson, Miss.*, and *Port Eads, La.*

Reports from other places indicate good health.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 9.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, September 7, 1878.

Abstract of Sanitary Reports received during the past week under the National Quarantine Act.

New Orleans.—During the week ended yesterday noon, there were 1,732 cases of *yellow-fever* and 526 deaths, making in all 4,609 cases and 1,395 deaths. During the twenty-four hours to noon yesterday there were 280 new cases and 61 deaths.

Port Eads, La.—During the past week, there was one death from yellow-fever, but no new cases.

Morgan City, La.—During the week to yesterday noon, there were 14 cases of yellow-fever and two deaths, making in all 22 cases and six deaths.

Vicksburgh.—During the week ended yesterday evening, there were 181 deaths, 41 of which occurred in the last twenty-four hours, making in all 366 deaths. About 2,500 cases have occurred since the outbreak. Assistant Surgeon Keyes telegraphs that "the fever is on the increase, and it is impossible to obtain accurate data."

Grenada.—Dr. Warren Stone reports 96 new cases of yellow-fever and 49 deaths during the week ended yesterday evening.

Canton, Miss.—During the fortnight ended yesterday noon, there were 172 cases of yellow-fever and 22 deaths, making in all 190 cases and 30 deaths. There are 120 cases under treatment, of which 16 occurred during the last twenty-four hours.

Ocean Springs, Miss.—During the week ended yesterday evening, there were 15 cases of yellow-fever and five deaths.

Holly Springs.—The first case of probable yellow-fever occurred on the 27th of August, resulting in death September 1. Two deaths from undoubted yellow-fever followed on the 2d. To yesterday evening, about 100 cases and 25 deaths had occurred. More than one-half of the population fled the city between the 2d and 5th instant. All of the members of the board of health are sick.

Memphis.—For the week ended Thursday evening, September 5, there were 529 deaths from yellow-fever. Dr. Thornton reports that the number of cases cannot be obtained. During the week before, the number of deaths (241) and the number of cases (721) were as one to three.

Hickman, Ky.—The first case of yellow-fever occurred August 16. There were 60 cases and 24 deaths to yesterday evening.

Louisville.—For the week ended yesterday evening, there were 25 new cases of yellow-fever and seven deaths, all refugees and river-boat men.

Saint Louis, Mo.—During the week ended yesterday evening, there were three cases of yellow-fever—two refugees and a resident nurse who attended the refugees in hospital. At quarantine, below Saint Louis, there were ten new cases admitted, and nine deaths—all refugees but one, the steward of the quarantine hospital, who is now sick, he having contracted the disease at quarantine. All boats and trains from infected districts are prohibited from entering the city, which remains healthy.

Pascagoula, Miss.—Three cases of yellow-fever in shipping from New Orleans between the 1st and 5th instant.

Cincinnati.—From August 28 to afternoon of September 4, three new cases of yellow-fever and two deaths occurred among refugees.

Bay Saint Louis, Miss.—One refugee arrived from New Orleans August 26, with yellow-fever and was sent back to New Orleans the next day. No other cases.

Mobile.—City healthy. No yellow-fever since the one death which occurred August 31.

Key West.—Two cases of yellow-fever and one death during the week ended yesterday noon.

Havana.—Seventy-four deaths from yellow-fever and seven from small-pox during the week ended August 31.

Matanzas, Cuba.—During the fortnight ended August 30, there were no cases of yellow-fever in the bay, and only a few cases on shore.

Sagua la Grande, Cuba.—Since the 16th of August, there were two deaths from yellow-fever, but at the date of advices, August 28, there were no cases in town or harbor.

Calcutta.—Nine deaths from cholera and 26 from small-pox, week ended July 6.

Bombay.—Forty-one deaths from cholera and six from small-pox, week ended July 16.

Madras.—Six deaths from cholera, week ended June 28.

No official reports could be obtained from Port Gibson, Miss., Greenville, Miss., and Brownsville, Tenn., where yellow-fever is reported to exist.

Reports from other places indicate good health, including Blount Spring, Ala., and Cedar Keys, Fla., both erroneously reported through the press, as having cases of yellow-fever.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 10.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, September 14, 1878.

Abstract of Sanitary Reports received during the past week under the National Quarantine Act.

Memphis.—During the week ended 6 o'clock, September 12, there were 687 deaths from yellow-fever. It is impossible for the Memphis authorities to ascertain the number of cases.

Brownsville, Tenn.—The first case of probable yellow-fever occurred on the 29th of August, resulting in death September 2, since which time there have been nine deaths from yellow-fever. There were 30 cases under treatment last evening. At least two-thirds of the population fled the city between the 1st and 4th instant.

Holly Springs.—One hundred and sixteen new cases of yellow-fever and 42 deaths occurred during the week ended yesterday evening, making in all 216 cases and 67 deaths. All of the resident physicians are sick.

Canton, Miss.—One hundred and fifty new cases of yellow-fever and 20 deaths for the week ended yesterday evening. First case, August 1; total cases, 340; total deaths, 50.

Port Gibson, Miss.—Dr. Wharton, of Mississippi State Health Board, reports about 500 cases of yellow-fever and 94 deaths to yesterday noon, and "very few subjects left to take it."

Water Valley, Miss.—One citizen taken with yellow-fever September 1, and died on the 7th. No other cases to yesterday evening since the refugee cases reported in August.

Ocean Springs, Miss.—Sixteen cases of yellow-fever and four deaths occurred during the week ended yesterday evening, making 34 cases and nine deaths in all since commencement, August 30.

Pass Christian, Miss.—From August 29 to September 9, there were 15 cases of yellow-fever and one death.

Bay Saint Louis, Miss.—Six cases of yellow-fever developed in Bay Saint Louis during the last week; two deaths. No new cases yesterday.

Pascagoula, Miss.—One of the cases, previously reported, since died. No new cases.

New Orleans.—During the week ended yesterday noon, there were 1,528 cases of yellow-fever and 530 deaths, making in all 6,137 cases and 1,925 deaths. In the last twenty-four hours, to Friday noon, there were 228 cases and 58 deaths.

Plaquemine, La.—One hundred and seventy-five cases of yellow-fever and 37 deaths had occurred up to September 8.

Morgan City, La.—There have been 25 cases of yellow-fever and eight deaths, of which three cases and two deaths occurred during past week.

Port Eads, La.—No cases and no deaths from yellow-fever during last week. There were 21 cases and two deaths from August 16 to 31—period not previously reported—making in all 67 cases and eight deaths.

Mobile.—One death from yellow-fever occurred on the 9th instant. No other cases to last evening. City healthy.

Saint Louis.—During the week, there were two cases, of local origin,

said by some to be yellow-fever, disputed by others; one died; the other was sent to quarantine hospital, where nine refugees died of yellow-fever during the same period.

Cairo.—The editor of the "Cairo Bulletin" died of yellow-fever on the 12th instant. One employé of the Bulletin office died yesterday. No other cases. On the 4th instant, four members of a family, residing two miles from Cairo, upon the bank of the Mississippi, were suddenly stricken with yellow-fever. On the 10th, the remaining two members of the family were attacked; one died. The children found an abandoned skiff in the river, and removed it to the house for repair. Three or four days afterward all who were around the boat were stricken with fever in one day. The quarantine physician dissents from the diagnosis of the attending and consulting physicians.

Hickman, Ky.—The telegraph-operator reported dead. No other information obtained.

Louisville.—There were 19 new cases of yellow-fever and seven deaths for the week ended yesterday evening—all refugees.

Cincinnati.—From September 4 to yesterday evening, there were seven cases of yellow-fever and four deaths. All of whom were recently from infected places South.

Gallipolis, Ohio.—There have been 25 cases of yellow-fever and nine deaths, resulting from communication with the steamboat "John D. Porter" and her barges, while anchored near Gallipolis. This vessel and her infected barges ascended the Mississippi and Ohio rivers, from New Orleans to Gallipolis, with effect much like a firebrand among explosives. The local health authorities could only prevent her landing, and the law forbids this office interfering in such cases.

Key West.—One case of yellow-fever and one death during the past week.

Kingston, Jamaica, September 3.—A few cases of yellow-fever have occurred at Port Royal, six miles from Kingston; one proved fatal. The steamship "Etna," from Hayti, arrived at Kingston on the 1st instant, with the purser sick of yellow-fever, contracted in Hayti.

Calcutta.—There were 11 deaths from cholera and 20 from small-pox during the week ended July 13.

Bombay.—Twenty-two deaths from cholera and nine from small-pox, week ended July 23.

Havana.—Fifty-one deaths from yellow-fever and five from small-pox during the week ended September 7.

During the week ended August 24, there were 24 deaths from scarlet-fever in *Birmingham*, England, and the same number in *Liverpool* and

London. In *Hamburg* there were 31 deaths from typhus-fever, 11 from enteric-fever, and 20 from diphtheria in the same week.

In *Alexandria*, Egypt, the annual rate of mortality per 1,000 of the population, based on the weekly mortality for the week ended August 8, was 58.8.

No official reports could be obtained from Vicksburgh, Grenada, Baton Rouge, Bolton, &c.

Reports from other places indicate good health.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

No. 11.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, September 21, 1878.

*Abstract of Sanitary Reports received during the past week under the
National Quarantine Act.*

Vicksburgh.—Epidemic abating. There were 121 deaths during the week ended yesterday evening, a decrease of 113 deaths from the week before. Eleven deaths occurred in the last twenty-four hours. Total deaths to date, 721.

New Orleans.—During the week ended yesterday noon, there were 1,401 cases of yellow-fever and 445 deaths, a decrease of 172 cases and 85 deaths, as compared with previous week. In the last twenty-four hours reported there were 165 cases and 69 deaths. Total cases, 7,538; deaths, 2,368.

Baton Rouge, La.—The first case of yellow-fever reported to the board of health occurred on the 14th of August. A previous case, not reported to the board, but thought to have been yellow-fever, occurred August 10. First death August 18. To 9 A. M. yesterday there had been 672 cases and 39 deaths.

Morgan City, La.—During the week ended yesterday evening, there were 41 cases of yellow-fever and 10 deaths, making in all 66 cases and 18 deaths.

Mobile, Ala.—Four cases of yellow-fever and two deaths occurred during the past week, making in all six cases and four deaths.

Grenada, Miss.—For the week ended yesterday evening, there were 20 new cases and 37 deaths. Total deaths to date, 271. No decrease in virulence of the fever. Dr. Henry Stone, of Natchez, is the only physician on duty.

Pass Christian, Miss.—From September 9 to 20, A. M., there were six new cases of yellow-fever and no deaths. Total cases, 21; death, 1.

Biloxi, Miss.—Twenty cases of yellow-fever and seven deaths have occurred to September 20.

Ocean Springs, Miss.—There were 14 cases of yellow-fever and three deaths for the week ended yesterday evening. Total cases, 51; deaths, 12.

Memphis.—Six hundred and twenty deaths from yellow-fever occurred during the week ended Thursday evening, September 19, making a total of 2,131 deaths. The number of cases not known to Memphis board of health.

Brownsville, Tenn.—During the week ended yesterday evening, there were 100 new cases of yellow-fever and 15 deaths, making in all 130 cases and 44 deaths. The deaths for the week ended September 14 were 29 instead of nine, as stated in last report.

Hickman, Ky.—Forty-two deaths from yellow-fever occurred during the week ended yesterday evening. Sixteen new cases and three deaths during the last twenty-four hours. Total cases to date, 205; deaths, 74.

Saint Louis.—During the past week there were six deaths from yellow-fever, four of which were at quarantine—all refugees.

Louisville.—Eighteen cases of yellow-fever and eight deaths for the week ended yesterday evening. Total cases, 77; total deaths, 26. All refugees.

Cincinnati.—Five cases of yellow-fever and one death during the week ended yesterday evening—all refugees. Total cases, 30; deaths, 13.

Gallipolis, Ohio.—Since the last report to September 18, there was one new case of yellow-fever and three deaths, making in all 28 cases and 12 deaths—all traceable to the infected steamer "John D. Porter."

Indianapolis, Ind.—One refugee died of yellow-fever September 17.

Bay Saint Louis, Miss.—Fifteen new cases of yellow-fever occurred during the last week. Deaths not reported.

Cairo, Ill.—Three new cases yellow-fever since last report, two died in Cairo, and one went to Mound City, eight miles from Cairo, and died there.

Havana.—Fifty deaths from yellow-fever and four from small-pox during the week ended September 14.

Key West, Fla.—Six cases of yellow-fever and five deaths during past week.

Morocco, Africa.—Asiatic cholera has appeared in the cities of Me-

quinez and Fez, Morocco, causing the death of from 20 to 30 victims daily in the former city, which is about 170 miles from Tangier. Information of the disease came to Felix A. Mathews, consul of the United States at Tangier, and, in his capacity as president of the board of health of Morocco, he despatched Dr. Tades Martinez, formerly of the Spanish navy, to visit Fez and Mequinez. Dr. Martinez left Tangier August 7, with an escort of 200 Moorish troops, and after forcing his way through the lines of the revolutionists besieging Mequinez, entered that city on the 14th of August, where he found the disease to possess all the well-known characteristics of Asiatic cholera. From a report obtained from the custodian of the Jewish cemetery, the number of deaths of the Israelites since the first appearance of the disease exceeded 400. The disease was reported to have spread to Sherarda, a province bordering on the city of Mequinez. Dr. Martinez attributes the disease to the unsanitary condition of the city, but Consul Mathews suggests the possibility of the germs of disease having been brought by the thousands of pilgrims returning from Mecca. The unsanitary condition of the crowded cities of Fez and Mequinez is described as "entire want of precautionary measures of cleanliness within and without the houses. In some quarters offals, filth, dead animals, and dirt of all kinds and origin are allowed to accumulate from year to year until they reach the level of the windows, creating inexpressibly repugnant exhalations of the most deadly and life-destroying miasm." The port of Tangier and its environs are free from any infectious disease.

Calcutta.—Nine deaths from cholera, week ended July 20.

Bombay.—Thirty deaths from cholera, week ended July 30.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 12.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, September 28, 1878.

Abstract of Sanitary Reports received during the past week under the National Quarantine Act.

New Orleans.—During week ended yesterday evening, there were 926 cases of yellow-fever and 332 deaths. For the last twenty-four hours there were 124 cases and 51 deaths. Total cases, 8,464; deaths, 2,700.

South Pass, La.—There had occurred, to the 26th instant, 42 cases of yellow-fever and two deaths.

Morgan City, La.—For the week ended yesterday evening, there were 79 cases of yellow-fever and 12 deaths. Total cases, 145; deaths, 30.

Baton Rouge, La.—From September 20 to 9 A. M. the 26th, there were 221 cases of yellow-fever and seven deaths. Total cases, 893; deaths, 46.

Plaquemine, La.—During the week ended September 15, there were 16 deaths from yellow-fever; 130 cases were still under treatment. The first case occurred August 1. Total cases to September 15, 305; deaths, 53.

Pitts Christian, Miss.—Twelve cases of yellow-fever and two deaths occurred during the week ended yesterday evening. Total cases, 33; deaths, three.

Biloxi, Miss.—There were five cases of yellow-fever and one death during the last week. Total cases, 25; deaths, eight.

Mississippi City, Miss.—Eight cases of yellow-fever and one death occurred last week.

Ocean Springs, Miss.—During the week ended yesterday evening, nine cases of yellow-fever occurred and five deaths. Total cases, 60; deaths, 17.

Bay Saint Louis, Miss.—There were 53 cases of yellow-fever and 15 deaths during the week ended yesterday evening. Total cases, 78; deaths, 20.

Water Valley, Miss.—During the eight days ended September 21, there were 18 cases of yellow-fever and five deaths. Total cases to that date, 21; deaths, seven.

Vicksburgh.—Fifty-eight deaths from yellow-fever during the week ended yesterday evening, 14 of which occurred in the last twenty-four hours. Total deaths to date, 779. Assistant Surgeon Keyes reports "epidemic over, save a few sporadic cases."

Greenville, Miss.—Out of a remaining population of four hundred and fifty, 227 have died of yellow-fever. Sixty persons are now sick with the fever, mostly convalescent, and "material for new cases exhausted."

Grenada.—Since last report there have been 10 new cases of yellow-fever and three deaths. Total deaths to yesterday evening, 274.

Port Gibson, Miss.—Total cases of yellow-fever to last evening, 620; total deaths, 110.

Memphis.—Deaths from yellow-fever for the week ended September 26, 297; total deaths, 2,428.

Brownsville, Tenn.—During the week ended yesterday evening, 67 cases of yellow-fever and 22 deaths occurred. Total cases, 197; deaths, 66.

Saint Louis.—During the past week, four deaths from yellow-fever at quarantine; none in the city. Only two cases now under treatment at quarantine.

Cairo, Ill.—During the last week, there were two cases of yellow-fever, one of them a refugee. Total cases, 14; and six deaths.

Louisville, Ky.—Eighteen cases and 10 deaths from yellow-fever occurred during the week ended September 27. Nine cases and five deaths were among the inhabitants living within two or three squares of the Louisville and Nashville depot, where some unclaimed baggage of refugees had been stored. The first case among the inhabitants occurred September 23. Total cases, 95; deaths, 36.

Cincinnati.—No new cases nor deaths from yellow-fever within the last week.

Gallipolis, Ohio.—Since last report, to September 24, three new cases of yellow-fever and five deaths have occurred. Two of the new cases are not traceable to the steamer "Porter." Total number of cases, 31; total deaths, including the six on the "Porter," 17.

Chattanooga, Tenn.—A refugee was taken with yellow-fever August 21, and another September 6. The first case among the inhabitants occurred September 18. Total cases to last evening, 41; deaths, 26.

Mobile, Ala.—From September 20 to the evening of the 24th, there were reported to the board of health as yellow-fever, 11 cases and seven deaths.

Key West, Fla.—No new cases of yellow-fever the past week. One refugee died of yellow-fever in Dayton, Ohio, September 21. One case of yellow-fever occurred in Philadelphia and one in Richmond during the same week; both were refugees from the South. Yellow-fever prevails in a number of small towns in Louisiana, Mississippi, Tennessee, and Kentucky, from which definite information of the number of cases and deaths has not been received. The fever is reported as spreading to the plantations.

Havana, Cuba.—For the week ended September 21, there were 31 deaths from yellow-fever, and nine from small-pox.

Rio de Janeiro.—From 14 to 22 deaths from small-pox occur daily. No other contagious disease prevails.

Morocco, Africa.—Advices from Fez and Mequinez, to August 24, are to the effect that the cholera is decreasing. Small-pox prevails in

the ports of Magador and Saffi. In the latter port about 15 deaths occur daily from that disease.

Calcutta.—Ten deaths from cholera and 17 from small-pox, week ended July 27.

Bombay.—Thirty-two deaths from cholera, week ended August 6.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 13.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, October 5, 1878.

Abstract of Sanitary Reports received during the past week under the National Quarantine Act.

New Orleans.—During the past week, there were 1,754 cases of yellow-fever and 360 deaths. Total cases to yesterday afternoon, 10,218; total deaths, 3,060.

Southwest Pass, La.—Five deaths from yellow-fever occurred during the past week.

Morgan City, La.—For the week ended yesterday evening, there were 155 new cases of yellow-fever and 18 deaths. Total cases, 300; deaths, 48.

Baton Rouge, La.—During the week ended 9 o'clock yesterday morning, there were 524 new cases of yellow-fever and 32 deaths. Total cases, 1,417; deaths, 78.

Plaquemine, La.—Two hundred and forty-two cases of yellow-fever and 10 deaths occurred during the week ended September 21. Total cases to that date, 547; deaths, 63.

Pass Christian, Miss.—There were 26 cases of yellow-fever and three deaths during last week. Total cases, 59; deaths, 6.

Mississippi City, Miss.—Twelve cases of yellow-fever and two deaths occurred last week. Total cases to yesterday evening, 20; deaths, three.

Canton, Miss.—Total cases of yellow-fever to the 4th instant, 720; total deaths, 113. Dr. Semmes reports fever milder, and material nearly exhausted.

Ocean Springs, Miss.—There were 18 cases of yellow-fever and four deaths during the week ended yesterday. Total cases, 78; deaths, 22.

Pascagoula, Miss.—One death from yellow-fever at quarantine last week.

Mobile, Ala.—For the week ended yesterday evening, there were 13 cases of yellow-fever and six deaths. Total cases, 30; deaths, 17.

Dr. Cochran reports yellow-fever at Bonsecour and Fish River.

Vicksburgh, Miss.—There were 70 deaths from yellow-fever during the week ended yesterday evening. Total deaths, 849.

Memphis, Tenn.—One hundred and ninety-nine deaths from yellow-fever occurred during the week ended the 3d instant. Total deaths to that date, 2,627.

Brownsville, Tenn.—During the past week, there were 77 cases of yellow-fever and 20 deaths. Total cases to yesterday evening, 274; deaths, 86.

Grand Junction, Tenn.—The first case of yellow-fever (refugee) occurred August 12. Total cases to yesterday evening, 120; deaths, 52.

Chattanooga, Tenn.—Forty-three cases of yellow-fever and 18 deaths for the week ended yesterday evening. Total cases, 84; deaths, 44.

Louisville, Ky.—During the week ended yesterday evening, there were seven cases of yellow-fever and five deaths. Of these, five cases and three deaths were among the inhabitants residing near the Louisville and Nashville depot. No alarm exists, as it is believed there that the fever will not spread beyond its present narrow limits. The small number of cases appear to warrant that belief. Total cases to date, 102, mostly refugees, as previously reported. Total deaths, 41.

Nashville, Tenn.—Six deaths from yellow-fever to yesterday evening; all refugees.

Saint Louis, Mo.—Two deaths from yellow-fever at quarantine since last report. None in the city. Total deaths at quarantine and city, 41.

Cairo, Ill.—Three cases of yellow-fever and one death since October 2. Information covering the first part of last week not definite enough to state here.

Cincinnati, Ohio.—From September 28 to October 2, there were two cases of yellow-fever, one a refugee, and one death.

Grenada, Miss.—Eighteen cases of yellow-fever under treatment. Number of deaths not definitely ascertained.

Water Valley, Miss.—For the week ended September 28, there were 18 cases of yellow-fever and 10 deaths. Total cases to that date, 39; deaths, 17.

Key West, Fla.—No cases of yellow-fever or deaths from September 21 to October 4.

Havana, Cuba.—Thirty-six deaths from yellow-fever and six from small-pox, for the week ended September 28.

The British iron steamship, "Ben Vairlish," from New Orleans, Sep-

tember 20, bound for Rotterdam, put in to the Norfolk quarantine October 14, leaking badly, having been on the Florida reefs thirty-six hours. One death from yellow-fever occurred *en route*, and there were three cases on arrival at quarantine, two of which were convalescent.

Saint Thomas, West Indies.—Advices to September 24 report two cases of yellow-fever in that city; one resulted in death September 23.

Advices from Gibraltar, to September 10, bring favorable reports from *Morocco*, where cholera has prevailed in the cities of *Fez* and *Mequinez*. The governor of Malta has ordered that vessels arriving from Morocco without passengers be quarantined twenty-one days; vessels with passengers among whom cholera or choleraic diarrhœa has prevailed are not allowed to enter the harbor.

Calcutta.—Eleven deaths from cholera, week ended August 3.

Bombay.—Thirty-one deaths from cholera, week ended August 13.

There are many places in Louisiana, Mississippi, and Tennessee, where the yellow-fever prevails; but they are not named in this bulletin for the reason that definite and reliable information of the number of cases and deaths could not be obtained.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 14.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, October 12, 1878.

Abstract of Sanitary Reports received during the past week under the National Quarantine Act.

New Orleans, La.—There were 988 cases of yellow-fever and 340 deaths during the week ended yesterday afternoon. For the last twenty-four hours, 164 cases and 49 deaths. The disease now prevails throughout the city. Total cases, 11,206; total deaths, 3,400.

Port Eads, La.—One death from yellow-fever occurred in the past week.

Baton Rouge, La.—Three hundred and ninety-seven cases of yellow-fever and 35 deaths for the week ended 9 A. M. yesterday. Total cases, 1,869; deaths, 113.

Morgan City, La.—During the week ended yesterday, there were 128 cases of yellow-fever and 63 deaths. Total cases, 428; deaths, 71.

Ocean Springs, Miss.—Twenty-five new cases of yellow-fever and six deaths for the week ended at noon yesterday. Total cases, 103; deaths, 28.

Pass Christian, Miss.—For the past week, there were 35 cases of yellow-fever and three deaths. Total cases, 94; deaths, nine.

Bay Saint Louis, Miss.—During the past two weeks, ended yesterday evening, there were 208 cases of yellow-fever and 36 deaths. Total cases, 286; deaths, 56.

Biloxi, Miss.—From commencement of outbreak of yellow-fever, to the 11th instant, there have been 275 cases and 28 deaths.

Port Gibson, Miss.—The yellow-fever has spread into the country; at least thirty plantations surrounding Port Gibson are now infected. The deaths to date are estimated at 190.

Friar's Point, Miss.—There have been 13 cases of yellow-fever and four deaths to yesterday evening.

Crystal Springs, Miss.—Total cases of yellow-fever to yesterday evening, 81; deaths, 36. The fever first appeared at Dry Grove neighborhood, 12 miles northwest of Crystal Springs.

Hernando, Miss.—The first case of yellow-fever—a refugee from Memphis—occurred August 31. Twenty-three cases and ten deaths during the past week. Total cases to yesterday evening, 83; deaths, 33.

Grenada, Miss.—Six cases of yellow-fever and two deaths for the past week. Corrected total deaths to yesterday evening, 323.

Spring Hill, Grenada Co., Miss.—Fifteen cases of yellow-fever and six deaths to yesterday. First case, October 1.

Vicksburgh, Miss.—For the past week, there were 33 deaths from yellow-fever; 96 deaths have occurred in Warren county, outside of Vicksburgh. Total deaths in city and county, 978.

Holly Springs, Miss.—Total cases of yellow-fever to October 8, 1,064; total deaths to that date, 241.

Jackson, Miss.—Between 30 and 40 cases of yellow-fever reported to October 5.

Memphis, Tenn.—There were 157 deaths from yellow-fever for the week ended the evening of the 10th instant. Total deaths, 2,784.

Brownsville, Tenn.—One hundred and thirty-nine cases of yellow-fever and 35 deaths for the week ended yesterday afternoon. Total cases, 413; deaths, 121.

Paris, Tenn.—The first case of yellow-fever among the inhabitants occurred September 6; the first case of the fever among refugees, August 23. Total cases to yesterday evening, 52; deaths, 22.

Cairo, Ill.—Total cases of yellow-fever to yesterday evening, 31, besides five doubtful cases; total deaths, 25. Assistant Surgeon Waldo, of the Marine-Hospital Service, taken sick on Thursday, probably with yellow-fever.

Saint Louis, Mo.—No cases of yellow fever in the city; three deaths at quarantine during the past week, two of which were refugees. The superintendent of the quarantine station is sick with yellow-fever.

Louisville, Ky.—For the week ended yesterday evening, there were 10 new cases of yellow-fever and eight deaths, of which numbers, nine cases and seven deaths were among the inhabitants residing in the infected portion of the city referred to in previous reports. Total cases, 112; deaths, 49. Of these 88 cases and 34 deaths were refugees.

Cincinnati, Ohio.—No new cases or deaths have occurred since last report up to the 9th instant.

Mobile, Ala.—There were seven cases of yellow-fever and three deaths since noon of October 4, to the 11th instant. Total cases, 37; deaths, 20.

Decatur, Ala.—The first case of yellow-fever occurred September 7. Total cases to yesterday evening, 82; total deaths, 15.

Key West, Fla.—Two cases of yellow-fever occurred this week, the first since the 21st of September. Total cases, 37; deaths, 16.

Canton, Miss.—From October 4 to October 10 there were 90 new cases of yellow-fever and 26 deaths. Total cases to that date, 810; deaths, 139.

Havana, Cuba.—Twenty-six deaths from yellow-fever and three from small-pox, week ended October 5.

No reports received from the following places where yellow-fever exists: Greenville, Miss.; Mississippi City, Miss.; Water Valley, Miss.; Chattanooga, Tenn.; Grand Junction, Tenn.; Hickman, Ky.; South Pass, La.; Plaquemine, La.; &c.

South America.—At *Rio de Janeiro* there were three deaths from yellow-fever and 24 from small-pox during the week ended September 19. Good health prevails in Barrauquilla, New Grenada. Advices September 19.

Europe.—In one hundred and thirty-two cities and towns of the German Empire, having an aggregate population of 7,376,861, there were 3,787 deaths from all causes for the week ended September 23, being an annual rate of mortality of 26.7 per 1,000 of the population. Among the deaths reported there were 104 from scarlet-fever, one from typhus, 104 from diphtheria and croup, and none from small-pox. At *Vienna, Austria*, during the week ended September 14, there were 12 deaths from small-pox, two from typhus, three from scarlet-fever, and 12 from diphtheria.

Africa.—A despatch from the United States consulate at Gibraltar, September 23, states that private advices from Tangier announce 103

deaths from cholera at Casablanca, Morocco, on the 17th of September; Moors, Jews, and Christians being attacked by the disease. At Fez the cholera is reported as increasing. Cholera has broken out in several other places in the interior of Morocco. At Mogadore, Morocco, the deaths from hunger and typhus are reported to be from 60 to 70 per day. The hungry Moors attacked the custom-house and British and Spanish consulates at that place, and were repulsed with loss.

Asia.—Thirty-one deaths from cholera in *Bombay*, week ended August 20. No deaths from cholera in *Calcutta*, week ended August 10.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

No. 15.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, October 19, 1878.

*Abstract of Sanitary Reports received during the past week under the
National Quarantine Act.*

New Orleans, La.—During the week ended yesterday afternoon, there were 976 cases of yellow-fever and 235 deaths, of which 89 cases and 36 deaths occurred in the last twenty-four hours reported. Total cases, 12,182; deaths, 3,635.

No cases of yellow-fever at *Port Eads* or *Southwest Pass* during the past week.

Morgan City, La.—There were 16 deaths from yellow-fever during the last week. The number of cases was incorrectly given for last report. Total cases to date reported to be about 432; total deaths, 87.

Mobile, Ala.—For the week ended yesterday noon, there were 56 cases of yellow-fever and 12 deaths. Total cases, 93; deaths, 32.

Decatur, Ala.—Seventy-three cases of yellow-fever and 12 deaths during the week ended yesterday. Total cases, 155; deaths, 27.

Ocean Springs, Miss.—During the week ended yesterday noon, there were 25 cases of yellow-fever and one death. Total cases, 128; deaths, 29.

Pass Christian, Miss.—There were 32 new cases of yellow-fever and four deaths for the week ended yesterday. Total cases, 126; deaths, 13.

Bay Saint Louis, Miss.—During the week ended yesterday evening, there were 52 cases of yellow-fever and 12 deaths. Total cases, 338; deaths, 68. The fever is on the decrease for want of material. The cases occurring now are more malignant.

Friar's Point, Miss.—Eight cases of yellow-fever and two deaths during the week ended yesterday evening. Total cases, 21; deaths, 6.

Crystal Springs, Miss.—The yellow-fever is confined principally to the country around *Dry Grove* and *Lebanon Church*. No case has yet occurred within the limits of the village of Crystal Springs. During the past week there were 31 cases and eight deaths. Total cases, 112; deaths, 44.

Baton Rouge, Miss.—During the week ended yesterday at 9 A. M., there were 301 cases of yellow-fever and 16 deaths. Total cases, 2,170; deaths, 129.

Pascagoula, Miss.—Total cases of yellow-fever at quarantine to October 12, five; deaths, two.

Scranton, Miss.—Total cases of yellow-fever to October 12, five; deaths, three.

Vicksburgh, Miss.—For the past week, there were 32 deaths from yellow-fever in the city, and 64 in the county of Warren, outside of the city. Total deaths in city and county, 1,074.

Holly Springs, Miss.—Total number of cases of yellow-fever to yesterday evening, 1,117; deaths, 285. About 200 cases under treatment. The fever is spreading into the surrounding country. A slight frost occurred in the night of October 16.

Grenada, Miss.—For the week ended yesterday evening, there were four new cases of yellow-fever and two deaths. The fever is spreading into the country. In fourteen families containing 97 unacclimated persons, there occurred 41 cases and two deaths during the past week. Total deaths in Grenada and adjacent country, 327.

Bolton, Miss.—Total cases of yellow-fever to yesterday evening, 117; deaths, 31. The first case occurred August 12.

Hernando, Miss.—During the week ended yesterday evening, there were 50 cases of yellow-fever and 23 deaths—several of the cases from one to three miles in the country. Total cases, 133; deaths, 56. A light frost was observed this morning.

Memphis, Tenn.—For the week ended the evening of the 17th instant, there were 108 deaths from yellow-fever. Total deaths, 2,892. Dr. Thornton, in charge of the Marine-Hospital Service at Memphis, has the fever.

Chattanooga, Tenn.—One hundred and one new cases of yellow-fever and 30 deaths for the week ended at 4 o'clock P. M. yesterday.

Paris, Tenn.—No cases of yellow-fever or deaths for the week ended yesterday afternoon. A frost has occurred and no further trouble is expected.

Milan, Tenn.—The first case of yellow-fever, a refugee, occurred August 26. The first case among inhabitants October 12. Total cases to yesterday, three; deaths, three.

Cairo, Ill.—No report of cases or deaths received. Assistant Surgeon Roswell Waldo, of the Marine-Hospital Service, died of the fever at his post yesterday.

Saint Louis, Mo.—Four deaths from yellow-fever at quarantine during the past week.

Louisville, Ky.—For the week ended yesterday, there were 15 new cases of yellow-fever and five deaths. Of these numbers, 14 cases and five deaths are among the inhabitants in the locality before described. Total cases, 127; deaths, 54; of which 89 cases and 34 deaths were among refugees.

Key West, Fla.—No new cases of yellow-fever during the week; one death occurred the 12th instant. Total cases, 37; deaths, 17.

No reports received from the following places, where the yellow-fever exists: Plaquemine, La.; Port Gibson, Miss.; Mississippi City, Miss.; Greenville, Miss.; Spring Hill, Miss.; Water Valley, Miss.; Biloxi, Miss.; Canton, Miss.; Brownsville, Tenn.; Grand Junction, Tenn.; Hickman, Ky.; and Gallipolis, Ohio.

Havana, Cuba.—Twenty-four deaths from yellow-fever and one from small-pox for the week ended October 12. The deaths from all causes for the months of April, May, and June, last, were 3,030, an increase of 989 deaths over the total for the same months of 1877; of this increase, 535 deaths were from small-pox, 98 from yellow-fever, and 130 from diarrhoea. The deaths from yellow-fever the past summer are recapitulated as follows: April, 28; May, 53; June, 184; July, 504; August, 374; and September, (to the 28th,) 168—making a total of 1,311 deaths.

Matanzas, Cuba.—Official returns of the board of health for the months of June, July, August, and September show that during that period there were 279 cases of yellow-fever, with 91 deaths. Cases are now rare and the fever has almost ceased.

Morocco, Africa.—Advices from Tangier up to September 21, report the prevalence of cholera, small-pox, and malignant fevers throughout the empire, except in the country fronting the Spanish coast. Small-pox prevails in every port except Tangier and Tetuan. The deaths from cholera at Casablaca—a port of 5,000 inhabitants—were on the increase, and numbered 103 on the 17th of September. Hundreds have died in the interior from cholera, fever, and starvation, especially in the middle and southern provinces.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 16.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, October 26, 1878.

*Abstract of Sanitary Reports received during the past week under the
National Quarantine Act.*

New Orleans.—During the week ended yesterday evening, there were 699 cases of yellow-fever and 229 deaths. Total cases, 12,881; deaths, 3,864.

Plaquemine, La.—Total cases of yellow-fever to October 20, 1,159; total deaths, 125.

Baton Rouge, La.—For the past week, there were 170 cases of yellow-fever and 15 deaths. Total cases, 2,340; deaths, 144.

Morgan City, La.—There were seven deaths from yellow-fever during the past week. Total cases to date, 510; deaths, 94.

Port Hudson, La.—Report to October 20, gives total cases of yellow-fever, 75; total deaths, 10, including four resident physicians. The first case of the fever occurred September 9; first death, September 13.

Mobile, Ala.—There were 71 new cases of yellow-fever and 17 deaths during the week ended yesterday evening. Total cases, 164; deaths, 49.

Ocean Springs, Miss.—No deaths from yellow-fever during the week ended at noon yesterday. There were eight new cases in Ocean Springs and nine cases in the country not previously reported. Total cases, 145; deaths, 29.

Pass Christian, Miss.—For the past week, there were 44 cases of yellow-fever and five deaths. Total cases, 170; deaths, 18.

Water Valley, Miss.—Total cases of yellow-fever to yesterday evening, 146; total deaths, 60. Six new cases yesterday.

Port Gibson, Miss.—The yellow-fever has spread into the country. As near as could be ascertained, about 30 deaths occurred in the past week. The colored people in the country repel the friendly aid offered them for fear of having the yellow-fever brought to them by nurses, while they are dying from it, without knowing that it is yellow-fever.

Hudson, La.—To October 13, there have been 75 cases of yellow-fever and 18 deaths.

Germantown, Tenn.—The first case of yellow-fever occurred August 20. First case among inhabitants August 25. Total cases to noon, October 16, 65; deaths, 36.

Memphis, Tenn.—For the week ended the evening of the 24th instant, there were 50 deaths from yellow-fever. Total deaths, 2,942.

Brownsville, Tenn.—During the week ended yesterday evening, there were 16 deaths. Total cases, 560; deaths, 152.

Chattanooga, Tenn.—For the past week, there were 80 cases of yellow-fever and 23 deaths. Of these, 51 cases and nine deaths were among colored people.

Saint Louis, Mo.—At quarantine, during the past week, three residents were admitted and died of yellow-fever. One patient previously reported also died of yellow-fever.

Cairo, Ill.—For the two weeks ended yesterday evening, there were 44 cases of yellow-fever, and six doubtful cases; deaths for the same period, 16. Total cases, 75; deaths, 41.

Louisville, Ky.—There were four new cases of yellow-fever for the week ended yesterday evening, and seven deaths. Total cases, 131; deaths 61, including refugees.

Cincinnati, Ohio.—No new cases of yellow-fever during past three weeks; one death reported for the past week.

Decatur, Ala.—During the week ended yesterday evening, there were 23 new cases of yellow-fever and 13 deaths. Total cases, 178; deaths, 40.

Biloxi, Miss.—Up to October 17 there were 295 cases of yellow-fever and 40 deaths.

Greenville, Miss.—To noon of October 11, there were 301 deaths from yellow-fever, 21 of which were in the country outside of Greenville.

No cases of yellow-fever or deaths during the past week at *Port Eads, La., South West Pass, La., and Key West, Fla.*

Havana, Cuba.—Twenty-three deaths from yellow-fever and one from small-pox for the week ended October 19.

Hernando, Miss.—During the week ended yesterday evening, there were 32 cases of yellow-fever and seven deaths. Total cases, 165; deaths, 63.

Deaths from four preventable diseases, reported for the week ended October 19:

Enteric-Fever.—In Baltimore, five deaths; Boston, two; Brooklyn, two; Charleston, three; Cleveland, one; Philadelphia, nine; Richmond, one.

Typhus-Fever.—One death in Brooklyn.

Scarlet-Fever.—In Baltimore, six deaths; Brooklyn, five; Cincinnati, 14; Cleveland, two; Philadelphia, 13; Richmond, one.

Diphtheria.—In Baltimore, six deaths; Boston, 14; Brooklyn, 15; Charleston, two; Cleveland, 13; New Haven, five; Philadelphia, 13; Richmond, two.

Great Britain.—During the week ended October 5, there were 3,409 deaths in twenty-three large cities of the United Kingdom. The mortality was at the average rate of 21 annually per 1,000 of the population. In Brighton the rate was 14, the lowest; in Liverpool 28, the highest. In the same cities, not including Edinburgh, there occurred 11 deaths from small-pox, 161 from scarlet-fever, and 33 from diphtheria.

Paris, France.—There were 30 deaths from enteric-fever during the week ended October 3. The annual rate of mortality per 1,000 of the population, based on weekly mortality, was 22.5.

No deaths from cholera in Calcutta for the week ended August 24, and none in Bombay for the week ended September 3.

No reports received from the following places where yellow-fever exists: Vicksburgh, Miss.; Holly Springs, Miss.; Canton, Miss.; Grenada, Miss.; Bay Saint Louis, Miss.; Friar's Point, Miss.; Mississippi City, Miss.; Spring Hill, Miss.; Crystal Springs, Miss.; Hickman, Ky.; Grand Junction, Tenn.; Paris, Tenn.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 17.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, November 2, 1878.

Abstract of Sanitary Reports received during the past week under the National Quarantine Act.

New Orleans, La.—There were 83 new cases of yellow-fever and 109 deaths for the week ended yesterday. During the week the board of health received information of 288 old cases, not previously reported. For the past twenty-four hours there were four new cases and eight deaths. Total cases, 13,252; total deaths, 3,973.

Morgan City, La.—During the past week, there were eight deaths from yellow-fever. Total cases to date, 563; deaths, 102.

Baton Rouge, La.—For the week ended yesterday evening, there were 75 cases of yellow-fever and 16 deaths. Total cases, 2,415; deaths, 160.

Mobile, Ala.—During the week ended yesterday evening, there were 60 new cases of yellow-fever and ten deaths. Total cases, 224; deaths, 59.

Decatur, Ala.—There were ten cases of yellow-fever and two deaths for the week ended November 1. Total cases, 188; deaths, 42.

Bay Saint Louis, Miss.—Total cases of yellow-fever to yesterday even-

ing, 535; deaths, 78. Only an occasional case occurring now, and the local health authority considers the epidemic at an end.

Port Gibson, Miss.—There were about ten deaths in the country near Port Gibson during the past week; none in Port Gibson, where the epidemic is considered at an end.

Pass Christian, Miss.—During the week ended yesterday evening, there were 19 cases of yellow-fever and no deaths. Two deaths from yellow-fever occurred in the week ended October 25, which were not reported in that week. Total cases to date, 189; deaths, 20.

Grand Junction, Tenn.—To October 26, there were 174 cases of yellow-fever and 74 deaths.

Milan, Tenn.—For the two weeks ended yesterday evening, there were 12 cases of yellow-fever and six deaths. Total cases, 15; deaths, nine.

Memphis, Tenn.—During the week ended October 31, there were 22 deaths from yellow-fever. Total deaths, 2,964. The board of health announced officially, October 28, that absentees could return with safety.

Mason, Tenn.—The first case of yellow-fever—a refugee—occurred August 29; the first case among inhabitants, October 4; since which time, to yesterday evening, there have been 60 cases and 24 deaths.

Chattanooga.—During the week ended yesterday evening, there were 28 new cases of yellow-fever and 12 deaths. Total cases, 433; deaths, 127.

Meridian, Miss.—Over 400 cases of yellow-fever are reported to have occurred to date. Total deaths, 83.

Gallipolis, Ohio.—During the week ended October 30, one new case of yellow-fever occurred and two deaths.

No cases of yellow-fever or deaths in *Louisville* and *Key West* during the past week.

Havana, Cuba.—Twenty-three deaths from yellow-fever and nine from small-pox for the week ended October 26.

Rio de Janeiro.—One death from yellow-fever and 11 deaths from "pernicious fever" for the week ended September 28. In the same week there were 1,495 deaths from all causes, of which 139 were from small-pox. Since May 1, 1878, there have been 1,233 deaths from small-pox.

EUROPE.—In one hundred and forty-nine cities and towns of the German Empire, having an aggregate population of 7,429,793, there were 5,755 births and 3,512 deaths for the week ended October 5, being an annual mortality rate of 24.6 per 1,000 of the population. The lowest

death rate, 11.2, was in Kiel; the highest, 42.2, was in Augsburg. The deaths include 108 from scarlet-fever, and 147 from diphtheria and croup. None from small-pox.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

No. 18.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, November 9, 1878.

Abstract of Sanitary Report received during the past week under the National Quarantine Act.

New Orleans.—There were 11 new cases of yellow-fever and 143 old cases reported for the week ended yesterday evening. For the past twenty-four hours no new cases and two deaths. Quarantine raised on the 5th instant. Total cases, 13,406—subject to revision. Total deaths, 4,010.

Morgan City, La.—There were eight cases of yellow-fever and three deaths during the past week. Total cases to yesterday evening, 571; deaths, 105.

Mobile, Ala.—During the week ended yesterday evening, there were 35 cases of yellow-fever and nine deaths. Total cases, 259; deaths, 68.

Pass Christian, Miss.—Seven new cases of yellow-fever and one death for the past week. Total cases, 196; total deaths, 21.

Ocean Springs, Miss.—For the week ended yesterday noon, there were four cases of yellow-fever and no deaths. Total cases, 150; deaths, 30.

Hernando, Miss.—Ten cases of yellow-fever and five deaths for the week ended November 2. No cases and one death during the past week. Total cases, 175; deaths, 69.

Dry Grove and Lebanon Church neighborhood, Miss.—Since October 19, there have been 13 new cases of yellow-fever and eight deaths. No new cases and but one death for the week ended November 6. Total cases, 125; deaths, 52. Crystal Springs, Miss., near Dry Grove, has, so far, escaped the fever.

Memphis, Tenn.—During the past week, there were 33 deaths from yellow-fever. Total deaths to the evening of the seventh, 2,997.

Chattanooga, Tenn.—Nine new cases of yellow-fever and four deaths during the past week. Total cases to yesterday evening, 444; deaths, 133.

Cairo, Ill.—During the two weeks ended yesterday, there were eight new cases of yellow-fever and three deaths. The last case occurred on the 4th, and the last death on the 6th instant. Total cases, 83, not including some doubtful cases. Total deaths, 44. Heavy frost on the 8th instant.

Vicksburgh, Miss.—There were 11 deaths from yellow-fever during the past week; no deaths during the past twenty-four hours. Six deaths during the week in the country near Vicksburgh.

Delta, La.—Four deaths from yellow-fever during the past week.

Decatur, Ala.—During the week ended last evening, there were eight cases of yellow-fever and one death. Total cases, 196; deaths, 43.

Gallipolis, Ohio.—No new cases of yellow-fever since October 26. The last death occurred October 27. Total cases, 65; deaths 37, not including six deaths which occurred on the steamboat "John D. Porter."

Key West, Fla.—No yellow-fever since October 13. The United States troops returned to Key West on the 7th instant.

Havana, Cuba.—Twenty-four deaths from yellow-fever and four from small-pox for the week ended November 2.

Lambayeque, Peru.—For the week ended October 12, sporadic cases of yellow-fever are reported.

Martinique.—There were no deaths from preventable diseases in the Island of Martinique during the week ended October 9.

Bermuda.—During the two weeks ended October 29, there were six deaths from all causes out of a population of 15,293, including 3,218 military and naval force. The bark "Blackpool," which left Bermuda quarantine for England October 22, had three or four cases of yellow-fever on board.

Japan and China.—Dr. Simmons, sanitary inspector for the Japanese government for the port of Yokohama, reports, under date of October 10, that he regards the occasional reported cases of cholera in Japan during the past summer as cholera-morbus, and not malignant or Asiatic cholera. On the 2d of October, however, malignant cholera broke out in Nagasaki, and in eight days there had been 58 cases and 10 deaths. Cholera has existed in Shanghai, China, for several months, and as Nagasaki is the first port of Japan entered by vessels from Shanghai, Dr. Simmons regards the outbreak as a new importation; but, owing to the lateness of the season and the sanitary measures instituted by the government, he does not anticipate a spread of the disease.

EUROPE.—In one hundred and forty-nine cities and towns of the German Empire, having an aggregate population of 7,369,009, there

were, during the week ended October 12, 5,470 births, and 3,539 deaths from all causes, being an annual death rate of 25 in 1,000 of the population. Wiesbaden shows the lowest death-rate, 11.2; and Chemitz the highest, 33.8. The total deaths include 80 from enteric-fever, 127 from scarlet-fever, and 154 from diphtheria. No deaths occurred from cholera, yellow-fever, small-pox, or typhus-fever.

Vienna, Austria.—During the two weeks ended October 19, 700 deaths are reported out of a population of 727,271, being an annual death rate of 25.53 per thousand of the population. The total deaths include 15 from small-pox, five from enteric-fever, 11 from scarlet-fever, and 46 from diphtheria.

Hamburg.—During the week ended October 12 there were 53 deaths from typhus-fever, 10 from scarlet-fever, and 39 from diphtheria and croup.

Great Britain.—In twenty-three large cities and towns of the United Kingdom, having an aggregate population of 8,373,953, there were 6,095 births during the week ended October 19, and 3,371 deaths from all causes. In twenty-one of these cities there were 14 deaths from small-pox, 184 from scarlet-fever, 22 from diphtheria, and 90 from fevers, principally enteric.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

No. 19.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, November 16, 1878.

Bulletin of the Public Health, issued by the Surgeon-General, U. S. Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended November 15.

New Orleans, La.—For the week ended yesterday evening there were 11 deaths from yellow-fever. Impossible to procure accurate number of new cases. No new cases or deaths for the past twenty-four hours.

Clinton, La.—The first case of yellow-fever occurred September 7. Among the white population there have been 40 cases and 15 deaths; among the colored people, 56 cases and no deaths.

Morgan City, La.—Twelve new cases of yellow-fever and one death during the last week.

Delphi, La.—The first case of yellow-fever occurred in August. Total cases to date, 100; deaths, 50. Both physicians died early.

Mobile, Ala.—There were 21 new cases of yellow-fever during the past week, and eight deaths.

Vicksburgh, Miss.—There were four new cases of yellow-fever and three deaths during the past week. For the same period there were eight cases and two deaths in the surrounding country.

Pass Christian, Miss.—Three new cases of yellow-fever during the last week; no deaths. The last case occurred on the 10th and the last death the 3d instant.

Chattanooga, Tenn.—Two new cases of yellow-fever and two deaths during the past week. Last case and last death occurred on the 10th instant—both colored.

Osyka, Miss.—The first case of yellow-fever occurred July 31. Total number of cases to date, 227; total deaths, 30.

Moscow, Miss.—Population, 185. First case of yellow-fever August 31; last case November 3. Total cases, 71; deaths, 35.

McComb, Miss.—First case of yellow-fever September 28. Total deaths to date, 21.

Lake, Miss.—To November 14 there had been 300 cases of yellow-fever and 86 deaths.

Canton, Miss.—Total cases of yellow fever to November 1, 919; deaths, 176.

Port Gibson, Miss.—To November 5 there were 655 cases of yellow-fever and 116 deaths.

Havana, Cuba.—Sixteen deaths from yellow-fever and none from small-pox for the week ended November 9.

Baltimore, Md.—For the week ended November 9, the average annual rate of mortality in 1,000 of the population, based on the weekly mortality, was 14.3. The deaths include six from diphtheria, five from enteric, and three from scarlet-fever.

Boston, Mass.—The average annual rate of mortality for the week ended November 9, was 17.5 per 1,000. There were 16 cases of scarlet-fever and three deaths; 16 cases of diphtheria and eight deaths.

Brooklyn, N. Y.—For the two weeks ended November 9, there were five cases of enteric-fever and two deaths; 41 cases of scarlet-fever and two deaths; 81 cases of diphtheria and 36 deaths.

Burlington, Vt.—For the month ended October 25, the average annual rate of mortality was 7.5. There were no deaths from preventable diseases.

Charleston, S. C.—For the week ended November 9, there were 25 deaths from all causes, including two from enteric-fever and one from diphtheria.

Chicago, Ill.—Average annual death rate, 14.7 for the week ended November 2. There were 13 deaths from diphtheria, four from scarlet-fever, and seven from enteric-fever.

Cleveland, Ohio.—In the week ended November 9, there were 45 cases of diphtheria and 20 deaths; two deaths from enteric-fever; and four cases of scarlet-fever—no deaths.

Lansing, Mich.—The deaths for October show an annual death rate of seven in 1,000 of population; no deaths from preventable diseases.

New Haven, Conn.—For the week ended October 9, there were 22 deaths from all causes, including two from diphtheria.

New York City.—The average annual mortality rate for the week ended October 26 was 21.4 per 1,000. The deaths include 11 from scarlet-fever and 18 from diphtheria.

Philadelphia, Pa.—For week ended November 9 the rate of mortality was 16.3. The deaths include 10 from diphtheria, seven from scarlet, and nine from enteric-fevers.

Richmond, Va.—The average annual rate of mortality was 15.79 for week ended November 9. The deaths include two from scarlet-fever and one from diphtheria.

Rochester, N. Y.—For the month of October the average annual rate of mortality was 12.16 per 1,000. There were two deaths from diphtheria and one from scarlet-fever.

Toledo, Ohio.—During the month of October there were three deaths from diphtheria and three from scarlet-fever. The average annual death rate, 13.68 for all deaths.

Milwaukee, Wis.—For the three weeks ended November 9 there were 61 cases of diphtheria and 14 deaths, 14 cases of scarlet-fever and no deaths; there were three deaths from typhus-fever and three from enteric-fever.

Rio de Janeiro, South America.—For the two weeks ended October 12 there were 227 deaths from small-pox, three from typhus-fever, 10 from enteric-fever, four from yellow-fever, and 18 reported from "pernicious fever." Deaths from all causes show an average death rate of 43.5.

Great Britain.—In twenty large cities and towns of *England*, having a population of 7,000,000, the deaths for the week ended October 26 show an annual rate of mortality of 21.6 per 1,000 of the population. The deaths include five from small-pox, 187 from scarlet-fever, and 71 from other fevers. In *Dublin*, for the same week, the mortality rate was 23.5. There were five deaths from small-pox and eight from scarlet-fever. In *Belfast* for the week ended October 31, there were nine cases of scarlet-fever and one death, three cases of enteric-fever, but no deaths.

Stockholm, Sweden.—For the week ended October 12 the total mortality shows an average annual rate of 17.3. Enteritis and diarrhœa caused one-fifth of deaths.

Christiania, Norway.—For the week ended October 19 there were three deaths from diphtheria and one from scarlet-fever. The average annual rate of mortality was 13.8 in 1,000 of the population.

German Empire.—During the week ended October 19, there were 5,475 births and 3,480 deaths in 149 cities and towns, of 15,000 people and upwards, having an aggregate population of 7,439,708. The average annual death rate, per 1,000 of the population, was 24.3; the lowest being 11.5, at Potsdam, the highest 37.9, at Augsburg. In *Berlin* the death rate was 27. The total deaths include 113 from scarlet-fever, 169 from diphtheria and croup, and 70 from enteric-fever. There were no deaths from small-pox or typhus-fever.

The "rinderpest" is reported to be decreasing in some of the provinces of Turkey.

China.—Advices from *Shanghai*, to October 1, report only sporadic cases of Asiatic cholera at that port. Cholera first appeared in China in 1820, having been brought by sea from Siam, and has proved very malignant at times, although at no time ravaging an extensive region of country. Sporadic cases occur at Shanghai in the summer and autumn of almost every year. All persons visiting China and Japan are advised to be revaccinated before going. The universal practice of inoculation with small-pox virus, which obtains in those countries, accounts for the frequent deaths among foreigners from small-pox. Inoculation does not always protect from subsequent attack. Diphtheria is not common in Shanghai. It is restricted almost wholly to higher latitudes of the Empire. Yellow-fever is unknown in eastern China. Typhus-fever often prevails, but generally over restricted areas. Leprosy prevails to some extent in the province of Canton, which furnishes nearly all the Chinese emigrants to the United States. The disease was introduced into the Sandwich Islands from China. *Singapore.*—The island and port of Singapore are reported free from all epidemic or infectious diseases; advices to September 27.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, November 27, 1878.

Bulletin of the Public Health, issued by the Surgeon-General, U. S. Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended November 23.

Yellow-Fever in the Mississippi Valley.—Advices to the close of November 22, show the following number of new cases of yellow-fever and deaths for the week ended on that day: There were 20 deaths in *New Orleans*; two deaths in *Vicksburgh*, and two in the adjacent country; three at *Delta, Miss.*; eight cases and four deaths at *Mobile*. The last case reported in *Morgan City, La.*, occurred November 19; the last death November 15. During the two weeks ended November 22, there were four new cases of yellow-fever and two deaths at *Decatur, Ala.*; 33 deaths at *Memphis*; and two deaths at *Cairo, Ill.* The last case at *Cairo* occurred October 28, and the last death November 15.

It is advised that during the coming winter all of the rooms of every dwelling, in the cities and towns which have suffered from yellow-fever, should be opened to the outer air for a sufficient length of time to subject them to a freezing temperature. Carpets, bedding, clothing, trunks, &c., should be exposed to the open air, and to a temperature below the freezing point. Unless this is done, sporadic cases may be anticipated, when the warm weather returns, from yellow-fever poison, which is liable to survive the winter in dwellings which are kept continuously at an elevated temperature.

Baltimore, Md.—For the two weeks ended November 23, the average annual rate of mortality in 1,000 of the population, based on the weekly mortality, was 19.2. The deaths include six from enteric-fever, eight from diphtheria, and six from scarlet-fever.

Boston, Mass.—The average annual rate of mortality for the two weeks ended November 23, was 21.9 per 1,000. There were four deaths from enteric-fever, 39 cases of scarlet-fever and four deaths; 47 cases of diphtheria and 16 deaths.

Brooklyn, N. Y.—During the week ended November 16, there were three cases of enteric-fever and two deaths; 38 cases of scarlet-fever and nine deaths; 56 cases of diphtheria and 19 deaths. The deaths from all causes show an average annual mortality of 20 per 1,000 of the population.

Charleston, S. C.—During the week ended November 16, there were 29 deaths from all causes, including one from diphtheria.

Chicago, Ill.—The average annual death rate was 13.4 for the week ended November 9. There were 11 deaths from diphtheria; two from scarlet and two from enteric-fevers.

Cleveland, Ohio.—For the week ended November 23, there were three cases and three deaths from enteric-fever; four cases and one death from scarlet-fever; and 31 cases and nine deaths from diphtheria. There were 44 deaths from all causes.

Cincinnati, Ohio.—During the week ended November 16, there were 101 deaths from all causes, being at the rate of 18.8 per 1,000 of the population. There were 26 deaths from scarlet-fever, and four from diphtheria.

Milwaukee, Wis.—The mortality rate for the week ended November 16, was 10.5.

Philadelphia, Pa.—For the week ended November 16, the average annual rate of mortality was 16.8 per 1,000. The deaths include seven from enteric-fever; 15 from scarlet-fever; and nine from diphtheria.

Havana, Cuba.—During the week ended November 16, there were 15 deaths from yellow-fever and six from small-pox. For the week ended November 23 there were 10 deaths from yellow-fever and four from small-pox.

St. Thomas, West Indies.—For the four weeks ended October 31, there were 12 cases of yellow-fever and eight deaths.

Tripoli, Africa.—A disease designated "febricula," by the local physicians, prevailed during the six weeks ended October 28, attacking 15,000 people out of a population of 20,000. No deaths have occurred. The attack lasts from six hours to five days and leaves the patient in a very prostrate condition. The Arabs call the disease "the club," from the sufferers feeling as if they had received a severe beating.

Vienna, Austria.—For the week ended October 19, there were 325 deaths, being a mortality-rate of 24 per thousand. The deaths include nine from scarlet-fever and 18 from diphtheria. There were three cases of small-pox and eight of enteric-fever.

Amsterdam.—During the week ended October 26, there were one death each from enteric-fever, typhus-fever, scarlet-fever, diphtheria; total deaths, 121; rate of mortality, 20.8.

Antwerp.—For the week ended November 2, there were 23 cases of enteric-fever and four deaths; total deaths, 68; mortality rate, 27.

England.—Twenty large cities and towns, having a population of millions, show an annual rate of mortality of 22 per 1,000 of the population. The deaths include four from small-pox, 200 from scarlet-fever, and 19 from diphtheria.

Glasgow.—For the two weeks ended November 2, there were 439 deaths from all causes, showing an average mortality rate of 21 per 1,000. The deaths include 115 cases of enteric-fever and 11 deaths; 69 cases of scarlet-fever and 11 deaths; 20 cases of typhus-fever; and 6 deaths from diphtheria.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

NOTE.—Hereafter the Bulletins will be issued on Wednesday instead of Saturday.

No. 21.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, December 4, 1878.

Bulletin of the Public Health, issued by the Surgeon-General, U. S. Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended November 30, 1878.

Yellow-fever.—During the week ended November 29, very few new cases or deaths occurred at any of the infected points. At *Mobile* there were three cases and one death. At *New Orleans* there were eight deaths; no new cases reported. At *Memphis* there were two deaths. At *Greenville, Miss.*, one death—a refugee.

Boston.—For the week ended November 30, there were 149 deaths from all causes, being an average annual death rate of 22.1 per 1,000 of the population. There were 13 cases of scarlet-fever and five deaths; 14 cases of diphtheria and seven deaths; and three deaths from enteric-fever.

Connecticut.—The report of the State board for October shows 82 deaths in New Haven and 66 in Hartford. Thirty-four per cent. of the deaths were from preventable diseases, generally traceable to unsanitary conditions. In *Orange*, a whole family were seriously poisoned by well-water, contaminated by a drain from a sink.

Brooklyn.—For the week ended November 23, the total deaths were 184, an average annual death rate of 17.2. There were 33 cases of scarlet-fever and eight deaths; 41 cases of diphtheria and 14 deaths; and 60 deaths from diseases of the respiratory system.

Philadelphia.—There were 295 deaths from all causes in the week ended November 23, an average annual death rate of 17.5. There were 13 deaths from scarlet-fever and 11 from diphtheria.

Baltimore.—During the week ended November 23, there were 106 deaths from all causes, an annual death rate of 15.5 per 1,000. Diph

theria caused nine deaths, scarlet and enteric-fevers five each, and phthisis, 16.

District of Columbia.—The average annual death-rate for October was 24.9. Preventable diseases caused nearly one-third of all the deaths.

Richmond, Va.—During the week ended November 23, there were 25 deaths, an average annual ratio of 16.45 per 1,000 of the population. In the week ended November 30, there were 20 deaths, a ratio of 13.16 per 1,000.

Cleveland, Ohio.—For the week ended November 30, the total deaths were 56, a mortality rate of 11.9 per 1,000. There were 25 cases of diphtheria and 15 deaths; six cases of scarlet-fever and two deaths.

Milwaukee, Wis.—Week ended November 23: Total deaths, 36; mortality rate, 15.2. There were 23 cases of diphtheria and two deaths.

Saint Louis, Mo.—For the week ended November 16, in an estimated population of 500,000, there were 83 deaths reported, an average annual death rate of 8.63 per 1,000. In the preceding week the average death-rate was 10.5.

Charleston, S. C.—Week ended November 23: Total deaths, 37; mortality rate, 38.5.

Savannah, Ga.—Week ended November 15: Total deaths, 18; annual ratio, 26.

Selma, Ala.—The annual ratio of deaths per 1,000 for July was 40.7; for August, 52; for September, 34; and for October, 23.

New Orleans, La.—For the four weeks ended November 17, the deaths from all causes were, respectively, 310, 193, 154, 135. The deaths from yellow-fever were 177, 69, 31, 29; from "malarial" fevers, 29, 19, 12, 7; from phthisis, 15, 15, 23, 21. Annual rate of mortality for the four weeks was 40; for the week ended November 17, 34.4.

Havana, Cuba.—In the week ended November 30, there were eight deaths from yellow-fever and six from small-pox.

Bermuda.—No deaths occurred in a population of 15,200 during the week ended November 26.

Rio de Janeiro.—Total deaths for the four weeks ended November 2, 1,287, being a mortality rate of 55.77 per 1,000. There were 449 deaths from small-pox; seven deaths from typhus, 13 from enteric, 34 from "pernicious," and 10 from yellow-fevers. The small-pox is raging with great intensity in the province of Ceará.

Bahia.—For the week ended October 31, there were 57 deaths, a mortality rate of 22.6 per 1,000. The deaths include seven from small-pox and three from typhus-fever.

Ningpo, China, a city of 400,000 inhabitants, has no health board or hospitals. The prevailing diseases are diarrhœa, enteric and typhus-fevers, consumption, small-pox, and cholera. The latter disease does not prevail epidemically.

Singapore.—The port and island are reported free from infectious diseases up to October 16.

Vienna.—For the two weeks ended November 2, there were 692 deaths from all causes, an annual death rate of 24.75 per 1,000. The deaths include 15 from small-pox, 12 from enteric-fever, six from scarlet-fever, and 38 from diphtheria.

Gibraltar.—Week ended October 20, there were 30 deaths, a mortality rate of 26.3.

Great Britain.—For the three months ended September 30, there were 129,348 deaths in *England* from all causes, being an average annual rate of 20.6 deaths in 1,000 of the population. In twenty large cities and towns the death rate for the quarter-year was 23.7. Twenty-three per cent. of the total deaths were from seven preventable diseases. There were 17,528 deaths from diarrhœa, 4,348 from scarlet-fever, 2,719 from other fevers, 649 from diphtheria, and 179 from small-pox. All but 16 of the fatal cases of small-pox occurred in London and its immediate vicinity. The percentage of deaths from diarrhœa was 3.7 per 1,000 of the residents of cities, against 1.5 per 1,000 in the rural districts.

In *twenty large English cities and towns*, having an aggregate population of seven and a quarter millions, the average annual death rate, for the four weeks preceding November 9, was successively 20, 21.6, 22, and 24.3, the increase being due to the greater fatality of pulmonary diseases.

London.—The deaths from all causes, for the week ended November 9, were equal to 23.2 per 1,000 in the city proper, and to 18.3 in the suburbs. There were 119 cases of small-pox in the hospitals and nine deaths. Eight out of the nine deaths were certified as unvaccinated.

Liverpool.—For the week ended November 9, there were 263 deaths, an average annual death rate of 25.7 per 1,000. Scarlet-fever caused 34 deaths; enteric-fever, eight; diphtheria, four.

Edinburgh.—The death rate per 1,000, for the week ended November 9, was 23. Nearly 50 per cent. of the deaths were due to pulmonary diseases.

Glasgow.—The death rate has continued steadily at 2.1 per 1,000 for six weeks.

Ireland.—For the three months ended September 30, the whole number of deaths was 20,390, an annual rate of 15.2 per 1,000. Diarrhœa

caused 708 deaths and small-pox 249. Preventable diseases caused 13.4 of the total deaths.

Dublin.—For the two weeks ended November 9, the deaths from all causes were 296, a mortality rate of 24.5. There were eight deaths from small-pox, making 468 deaths from this cause since January 1, 1878.

On the Island of *St. Kilda*, the deaths exceed the births in the ratio of three to two and a half. Ninety per cent. of the infants born on the Island die of "trismus nascentium," presumably induced by both the nursing mothers and the infants being fed almost wholly on the excessively fatty flesh of the petrel.

German Empire.—During the two weeks ended November 9, there were 10,490 births and 6,535 deaths in 150 cities and towns of 15,000 inhabitants and upwards, having an aggregate population of 7,400,000. The average annual rate of mortality was 22.9 per 1,000 of the population, against 24.3 for the week ended October 19. The deaths include 318 from diphtheria, 228 from scarlet-fever, and two from small-pox. Phthisis caused the death of 891 persons.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

No. 22.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, December 11, 1878.

Bulletin of the Public Health, issued by the Surgeon-General U. S. Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended December 7, 1878.

Yellow-fever has almost wholly disappeared from the Mississippi Valley. In New Orleans, four deaths were reported during the past week. The total number of cases up to date is reported as 22,600. There was one death and one new case at *Fort Gibson, Miss.*; one new case (a returned refugee) at *Meridian, Miss.*; one death at *Memphis*, on December 6; three cases and one death at *Mobile*, for week ending December 10.

New Haven.—For the month ended November 30, there were 87 deaths from all causes, 19 being from preventable diseases. The annual death rate per 1,000 of the population was 17.4.

New York.—Week ended December 7: Total deaths, 455; annual rate, 21.8. Twenty-eight deaths resulted from scarlet-fever, 19 from diph-

theria, 74 from phthisis, 49 from pneumonia, 17 from bronchitis, and four from enteric-fever. During 1878, only two deaths from small-pox have occurred in the city. This immunity is attributed to the efficient system of free vaccination that is carried out.

Brooklyn.—Week ended November 30: Deaths from all causes, 155; annual ratio, 14.68. Forty-one cases of scarlet-fever and six deaths; 37 cases of diphtheria and 12 deaths; 22 deaths from phthisis, 20 deaths from pneumonia, nine from bronchitis, and seven from croup.

Week ended December 7: Reported deaths from all causes, 175; rate, 16.6. Thirty-eight cases and six deaths from scarlet-fever; 33 cases of diphtheria and 12 deaths.

Philadelphia.—Week ended November 30: Total deaths, 299; annual ratio, 17.75. Seven deaths from diphtheria, (minors,) six from scarlet-fever, eight from enteric fever, 53 from phthisis, and 20 from pneumonia.

Boston.—Week ended December 7: Deaths from all causes, 143; annual rate, 21. There were 21 cases of scarlet-fever and one death; 30 cases of diphtheria and eight deaths.

Wilmington, Del.—For the month ended November 30, the total deaths were 59, including seven from diphtheria, two from scarlet-fever, and one from enteric-fever. The annual rate, 17.7.

Baltimore.—Week ended December 7: Deaths from all causes, 120; annual rate, 17.1. There were 20 cases of enteric-fever and five deaths; five cases of diphtheria and one death; pneumonia, prevalent.

Lynchburgh, Va.—Month of November: Total deaths, 23; rate, 16.3; diarrhoea, diphtheria, and enteric-fever, each caused two deaths.

Cleveland.—Week ended December 7: Total deaths, 49; annual rate, 15.7. Seven cases of scarlet-fever and five deaths; 23 cases of diphtheria and eight deaths.

Milwaukee.—Deaths from all causes, 38; annual rate, 16. Twenty cases of diphtheria, with nine deaths.

Nashville.—For the month ended November 30, the total deaths numbered 40; "zymotic" disease causing two, (dysentery,) phthisis eight, pneumonia seven deaths; annual rate per 1,000 for the month, 14.76. Among the white population the annual rate was 11.42 per 1,000, against 20.87 in the colored.

Charleston, S. C.—Week ended November 30: Total deaths, 23; annual ratio, 24.

Savannah.—For the week ended November 29, the deaths reported numbered 29, an annual ratio of 54. For week ended December 7, there were 12 deaths; ratio, 22.2.

Mobile.—For the month ended October 31, there were 132 deaths, 40 being from yellow-fever, 12 from phthisis.

Havana.—During the week ended December 7, there were 10 deaths from yellow-fever, and 12 from small-pox.

Saint Thomas.—The United States consul telegraphs that yellow-fever has appeared in the Island.

Great Britain.—Week ended November 16: *In twenty-three of the largest cities and towns of the United Kingdom*, there were 5,637 births, and 3,993 deaths, an annual rate of 35.1 and 24.9 per 1,000 of the population, respectively, the death rate ranging from 14 at Leicester and 17 at Portsmouth and Brighton to 32 at Liverpool. The percentage of deaths from seven "zymotic" diseases per 1,000 of the population ranged from 0.5 at Brighton to 7.6 at Liverpool.

In *London*, the total deaths for the week ended November 16, were 1,665, a rate of 24.5 against 20.2 and 23.2 in the two preceding weeks. There were 434 deaths from pulmonary diseases, 269 being from bronchitis, 64 deaths from scarlet-fever, 43 from whooping-cough, 13 from diphtheria, 37 from fevers, 16 from small-pox. No death from the latter disease occurred in any of the other nineteen large cities of England.

Liverpool.—Week ended November 16: Total deaths, 322; annual rate, 31.5. Fifty-nine deaths from scarlet-fever, six from enteric-fever, and two from diphtheria.

Dublin.—Week ended November 16: Deaths from all causes, 176; annual ratio, 30. There were two deaths from typhus, five from enteric, and six from scarlet-fevers; 32 from phthisis and 42 from other pulmonary diseases. There were 62 cases of small-pox in the hospitals and 11 deaths from the disease.

Galway.—Since July, small-pox has been fatally prevalent, 42 deaths having occurred in a population of 19,000, during the seventeen weeks preceding November 9.

Edinburgh.—In the week ended November 16, the death rate fell from 23 in the previous week to 16. From "zymotic" diseases, two deaths.

In *Glasgow*, for the same week, the rate rose from 21 to 25.

Amsterdam.—For the two weeks ended November 16, the deaths from all causes numbered 238, an annual ratio of 20.5. Two deaths from typhus, two from enteric, and four from scarlet-fever.

Antwerp.—Week ended November 16: 77 deaths; annual rate, 25.4.

German Empire.—No statistical returns received. Diphtheria prevalent in various portions of the Empire, and public attention has been directed towards means of prevention of this scourge by the prostra-

tion of six members of the royal family of Hesse with the disease, two having died.

Africa, Tangier.—During the four weeks preceding October 5, there were 1,069 deaths at Casa Blanca from cholera, 163 from small-pox, 32 from typhus-fever; the total deaths from these diseases being 1,264 in a population estimated at 5,500. The consul reports that no note is taken of deaths by famine, accident, or common diseases.

India.—In *Madras* enteric-fever of a fatal type is very prevalent in the native portions of the city, which are described as extremely filthy, and quite devoid of sanitary regulations. In 1876-'7 the deaths from small-pox in India numbered 200,000, and in the preceding two years 500,000. During 1875-'6, only two deaths from this disease occurred among 120,000 European troops, the exemption being clearly due to vaccination. The latest returns from the following cities give the annual death rate per 1,000 for Madras at 52; Alexandria, 50, Cracow, 39; Bombay, 37; Munich, 34; Calcutta, 33.4; Saint Petersburg, 32; Rome, 28; Vienna, 27; Berlin, 26; Paris, 25; Rotterdam, 25; Ham-burgh, 23; Geneva, 20; Copenhagen, 19; Stockholm, 15.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 23.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, December 18, 1878.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended December 14, 1878.

Yellow-fever.—During the week, the only deaths reported were two at Memphis, on the 10th and 12th instant.

Burlington, Vt.—Month ended November 25: Deaths from all causes, 22; an annual ratio of 16.5 to each 1,000 of the population. Four deaths from diphtheria.

Massachusetts.—For the week ended December 7: In sixteen cities, with an estimated aggregate population of 742,000, there were 274 deaths, an average annual rate of 19.25. The local death rate ranged from 0 at Pittsfield (population 12,600) and 10 to 12 at Chelsea, Newburyport, Gloucester, Cambridge, and Worcester, to 21.12 at Boston, 26.60 at Salem, and 42 at Fall River. In the latter city, the death rate from the principal "zymotic" diseases was nearly 25 per 1,000 of the

population. The average death rate from these diseases in the sixteen cities was four.

Boston.—Week ended December 14: Total deaths, 137; annual ratio, 22; 17 cases of scarlet-fever, three deaths; 15 cases of diphtheria, 10 deaths.

Providence, R. I.—Month of November: Total deaths, 165; annual rate, 19.80. Deaths from phthisis, 29; from pneumonia, 12; from diphtheria, 32; from scarlet-fever, 2.

New York City.—Week ended December 14: Deaths from all causes, 495; annual rate, 23.6. Phthisis caused 94 deaths; pneumonia, 51; bronchitis, 30; scarlet-fever, 36; diphtheria, 21; enteric-fever, 5.

Hudson County, N. Y., including Jersey City and Hoboken.—In the month of November, in an estimated population of 180,000, there were 294 deaths; 42 being from diphtheria and croup; 12 from scarlet-fever; three from enteric and five from "malarial" fever; 39 from phthisis; 28 from pneumonia; annual rate, 20.

Brooklyn.—Week ended December 14: Total deaths, 184; rate, 17.4. Seventy-one cases of scarlet-fever, seven deaths; 42 cases of diphtheria, seven deaths; 20 deaths from phthisis.

Philadelphia.—Two weeks ended December 14: Total deaths, 601; annual rate, 17.6. Thirty-two deaths from diphtheria, (minors;) 24 from scarlet-fever.

Baltimore.—Week ended December 14: Total deaths, 95; annual ratio, 14. From scarlet-fever, four deaths; from enteric-fever, three; from diphtheria, three; from phthisis, 17.

Cleveland.—Week ended December 14: Total deaths, 47; annual rate, 15. Four cases of scarlet-fever, two deaths; 10 cases of diphtheria, eight deaths.

Cincinnati.—In the four weeks ended December 14, the deaths from all causes were, respectively, 96, 96, 111, and 83; from scarlet-fever, 16, 18, 26, and 17; phthisis, 12, 17, 7, and 9; pneumonia and bronchitis, 5, 9, 9, and 4; annual rate, 18, 18, 20, and 15. During 1878, one death from small-pox.

Milwaukee.—Week ended December 7: Twenty-eight deaths; ratio, 12. Sixteen cases of diphtheria, two deaths.

Saint Paul.—In the three months ended November 30, there were 120 deaths; annual rate, 13. In June, July, and August, deaths numbered 137, an annual ratio of 15.

Saint Louis.—For the two weeks ended December 1, there were 221 deaths, an annual ratio of 11.5 in the estimated population. Scarlet-

fever caused two deaths; diphtheria, 16; enteric-fever, six; phthisis, 28; pneumonia, 21.

Norfolk.—In November, 43 deaths, nine being from phthisis, five from pneumonia, 11 from "zymotic" disease; annual death rate, 22.4.

Charleston.—Week ended December 7: Twenty-six deaths; annual rate, 26.

Savannah.—Week ended December 13: Twenty-five deaths; annual rate, 46.

New Orleans.—For the three weeks preceding December 8, the total deaths numbered, respectively, 104, 100, and 88; from yellow-fever, 14, 4, 2; "malarial" fever, 10, 7, 5; phthisis, 7, 14, 9; pneumonia, 7, 9, 6.

Havana.—Week ended December 16: Nine deaths from yellow-fever, five from small-pox.

Rio de Janeiro.—Week ended November 9: Two hundred and forty-three deaths, small-pox causing 65. Of 1,321 deaths in October, 453 resulted from this disease.

Great Britain.—Week ended November 23: In twenty-three cities, having an estimated population of 8,374,000, there were 3,976 deaths, an average rate of 25 per 1,000, ranging from 14 at Portsmouth and 17 at Brighton, to 24 at Birmingham, 26 at Manchester, and 29 at Liverpool. The percentage of deaths from the principal preventable diseases varied from less than one at Portsmouth, Brighton, Plymouth, and Bristol, to five at Dublin, and 6.4 at Liverpool.

London.—Week ended November 23: The total deaths numbered 1,547, an annual ratio of 22.6 against 20.2, 23.2, 24.3 in the three preceding weeks. Bronchitis caused 207 deaths; pneumonia, 107; scarlet-fever, 54; diphtheria, 11; small-pox, seven. There were 149 cases of the latter disease in the hospitals on November 23. In inner London the death-rate was 22.6; in the outer suburban ring, 17.9.

Dublin.—Week ended November 23: Deaths, 213; annual rate, 35. Nineteen deaths from phthisis, 46 from bronchitis, six from scarlet-fever, 11 from small-pox; 69 cases of the latter disease in the hospitals.

At *Cork*, the death-rate for the week was 38; at *Derry*, 17; at *Belfast*, 32. In the latter city, 13 per cent. of all the deaths in October were caused by scarlet-fever.

In *Galway*, the death-rate for the week was 42. Small-pox is still prevalent, and caused 32 per cent. of all the deaths in the preceding month.

German Empire.—In one hundred and forty-eight cities and towns of more than 15,000 inhabitants, and an aggregate population of 7,451,536, during the week ended November 9, there were 3,336 deaths, an annual

ratio of 23.3 against 22.7 in the preceding week. Phthisis caused 424 deaths; pneumonia, 260; diphtheria, 180; scarlet-fever, 117. Thirty-two and five-tenths per cent. of all the deaths were among children less than one year of age. But one death in the Empire from small-pox, (at Breslau.)

Berlin.—In week ended November 9, 465 deaths, an annual rate of 24.5. Phthisis caused 56 deaths; diphtheria, 36; scarlet-fever, 23.

For the week ended November 9, the death rate at Breslau was 24; at Munich, 33.7; at Dresden, 21.8; at Leipzig, 17.4; at Hamburg, 22.8; at Cologne, 26.6; at Frankfort, 15.7; at Strasburg, 26.3.

Vienna.—Week ended November 9, deaths from all causes, 378; annual ratio, 27. Eighty-eight deaths from phthisis, 42 from pneumonia, 29 from diphtheria, five from scarlet-fever, six from small-pox.

Paris.—Week ended November 9, 870 deaths; 163 being from phthisis, 100 from pneumonia, 25 from diphtheria, 20 from enteric-fever. Annual rate, 22.8.

Africa, Tangier.—Cholera is disappearing from the interior cities of Morocco, where it has prevailed for some months with great severity. At Casa Blanca, in the week ended October 12, there were 53 deaths from cholera and 27 from small-pox. In the week ended October 19, cholera caused five deaths and small-pox 17. (See bulletin, No. 22.)

The latest weekly returns from the following cities show the average annual death rate: At Madras, 51.4; Odessa, 46.5; Buda-Pesth, 41; Calcutta, 38; Alexandria, 45; Cracow, 38; St. Petersburg, 32; Venice, 31; Warsaw, 30; Lisbon, 29; Naples, 22; Rome, 21; Copenhagen, 17; Stockholm, 17.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

NOTE.—As soon after January 1, 1879, as practicable, the "Bulletin" will be printed in tabular form, and extended as far as useful and practical. Health officers and registrars of vital statistics, who have been requested to furnish information, will aid in imparting to it the practical value it is desired it should possess, by forwarding their mortality returns as promptly as possible.

Nos. 24 and 25.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, January 1, 1879.

Bulletin of the Public Health, issued by the Surgeon-General, U. S. Marine-Hospital Service, under the National Quarantine Act of 1878.—Two weeks ended December 28, 1878.

Yellow-Fever.—Since December 14 the only cases reported were two at Port Gibson, Miss., returned refugees.

Massachusetts.—For the two weeks ended December 21: In eighteen cities, with an aggregate population of about 770,000, there were 588 deaths, an annual ratio of 19.92 per 1,000 of the population. Sixteen per cent. of all the deaths resulted from the principal "zymotic" diseases. Phthisis caused 102 deaths; pneumonia, 58. Annual death rate for the two weeks at Worcester was 22; Cambridge, 21.46; Lynn, 16.5; Newton, 9.15; Springfield, 8.28.

Boston.—Two weeks ended December 28: Total deaths, 330; annual rate, 23. Thirty-seven cases of scarlet-fever, six deaths; 48 cases of diphtheria, 26 deaths. In the last week, 36 deaths from phthisis, 19 from pneumonia.

New Haven.—Two weeks ended December 21: Deaths, 38; annual rate, 16.5.

New York.—Two weeks ended December 28: Total deaths, 977; rate, 23.3. Ninety-six deaths from scarlet-fever, 51 from diphtheria, 196 from phthisis, 87 from pneumonia, 43 from bronchitis.

Brooklyn.—Two weeks ended December 28: Total deaths, 456; annual ratio, 21.6. One hundred and sixty-three cases of scarlet fever, 26 deaths; 88 cases of diphtheria, 32 deaths; 44 deaths from phthisis; 47 from pneumonia and bronchitis. One case of small-pox, being the first reported since July, 1877. Case imported from Montreal; thirteen days in the United States.

Philadelphia.—Two weeks ended December 28: Five hundred and ninety-one deaths; annual rate, 17.5. Fifteen deaths from enteric-fever, 17 from scarlet-fever, 27 from diphtheria.

Baltimore.—Two weeks ended December 28: Deaths, 249; annual ratio, 17.8. Thirteen deaths from scarlet-fever, 20 from diphtheria, 37 from phthisis.

District of Columbia.—Month of November: Two hundred and ninety-six deaths; rate, 22.2.

Richmond.—Three weeks ended December 21: Total deaths, 78; annual ratio, 17.

Cleveland.—Two weeks ended December 28: Total deaths, 100; annual ratio, 16. Ten cases of scarlet-fever, six deaths; 29 cases of diphtheria, 16 deaths.

Milwaukee.—Two weeks ended December 21: Total deaths, 69; rate, 14.5. Forty-four cases of diphtheria, eight deaths.

Chicago.—Week ended December 14: One hundred and fifty-five deaths; ratio, 17.5. Seven deaths from scarlet-fever, seven from diphtheria, three from enteric-fever.

Saint Paul.—Month of November: Total deaths, 38; annual ratio, 13.

Saint Louis.—Two weeks ended December 15: Total deaths, 217 annual ratio, 10.87.

Charleston.—Two weeks ended December 21: Total deaths, 46; ratio, 24.

Savannah.—Two weeks ended December 27: Total deaths, 48; ratio, 44. In the colored population the death rate greatly exceeds that among the whites.

New Orleans.—Week ended December 15: Ninety-two deaths; rate, 22.7. Phthisis caused 13 deaths; pneumonia, seven; diphtheria, three; yellow-fever, one.

Salt Lake City.—In the month of November, there were 55 deaths, 24 being from diphtheria; annual ratio, 26.4.

San Francisco.—Two weeks ended December 16: One hundred and sixty-five deaths, eight being from diphtheria, three from scarlet-fever, two from enteric-fever; annual ratio, 14.

Havana.—Two weeks ended December 28: Twelve deaths from yellow-fever, 19 from small-pox.

Pernambuco.—In the five weeks ended December 7, there were 784 deaths, 223 being from small-pox; annual ratio, 50.

Bahia.—Two weeks ended December 1: Deaths from all causes, 141; ratio, 27. Six deaths from small-pox.

Rio de Janeiro.—In the month of November, the total deaths were 989; annual ratio, 40. Yellow-fever caused three deaths; small-pox, 236, against 453 from the same cause in October. The disease is disappearing from the capital, but is making terrible ravages in the province of Ceará. The United States consul officially reports that the deaths from small-pox in the city of Ceará average 300 per day.

Great Britain.—Two weeks ended December 7: In twenty cities, with an aggregate population of 7,270,000, there were 7,705 deaths, (400 being from accident,) an average annual rate of 27.6 per 1,000 of the population. The rate at Portsmouth was 19; Brighton, 23.6; Bristol, 27; Manchester, 31; Sheffield, 34.6. Scarlet-fever caused 420 deaths.

London.—In the two weeks there were 3,640 deaths. Excluding 389 registered from a drowning accident in September, the rate was 23.7. Eight hundred and forty-two deaths resulted from pulmonary diseases, 132 from scarlet-fever, 16 from diphtheria, 81 from whooping-cough, 56 from measles, 81 from various "fevers." There were 196 cases of small-pox in the hospitals on December 7, and 12 deaths during the two weeks in London, but none in the other nineteen large cities of England.

Liverpool.—Two weeks ended December 7: Total deaths, 703; annual ratio, 34.4. There were 69 deaths from scarlet-fever.

Birmingham.—Two weeks ended December 7: Total deaths, 419; annual ratio, 28.5. Sixty-seven deaths from scarlet-fever.

Glasgow.—Month of November: Total deaths, 1,113; annual rate, 23.6. Scarlet-fever caused 35 deaths; diphtheria, 11; enteric fever, 20.

Dublin.—In the two weeks ended December 7, the deaths numbered 414, an annual rate of 34.2. The deaths from acute pulmonary affections, in the seven weeks preceding December 7, numbered, respectively, 21, 24, 30, 43, 57, 73, 89, and bore a direct relation to the meteorological conditions, the month being the coldest November since 1807. Small-pox caused 18 deaths, and 100 new cases were admitted to the hospitals during the fortnight. The disease also prevails with varying severity at Galway, Tullamore, and other points in the Island. Annual death rate at Galway was 37; Belfast, 30; Cork, 29; Derry, 20.

Paris.—Two weeks ended December 5: Total deaths, 1,809; annual ratio, 23.6. Twelve deaths from small-pox, 40 from enteric fever.

German Empire.—Two weeks ended November 23: In one hundred and fifty cities, with an aggregate population of 7,450,000, there were 7,335 deaths, an annual ratio of 24.1. Thirty-one per cent. of all the deaths were of children under one year, and 14 per cent. of children between one and five years of age. Phthisis caused 903 deaths, 13 per cent.; pneumonia, 539 deaths, 8 per cent.; scarlet-fever, 220 deaths, 3.2 per cent.; diphtheria, 381 deaths, 5.5 per cent., respectively, of the whole number of deaths. But one death from small-pox in the Empire, (at Hamburg.)

Berlin.—Two weeks ended November 23: Total deaths, 975; annual ratio, 24.5. Phthisis caused 108; pneumonia, 60; scarlet-fever, 54; and diphtheria, 71 deaths.

Vienna.—Two weeks ended November 23: Total deaths, 759; annual ratio, 21. Nineteen deaths from small-pox, 35 deaths from diphtheria.

Saint Petersburg.—Two weeks ended November 23: Total deaths, 919; annual ratio, 35.6. Small-pox caused 70 deaths; enteric-fever, 51 deaths.

India—Calcutta.—Two weeks ended November 2: Total deaths, 643; annual ratio, 39. Cholera caused 27, and fevers 128 deaths.

Madras.—Two weeks ended October 25: Total deaths, 674; annual ratio, 44. Fevers caused 198 deaths; dysentery, 115.

Bombay.—Two weeks ended November 5: One thousand and sixty-seven deaths, 284 from fevers. Annual ratio, 34.

China.—On account of a recent flood, malarial diseases are very prevalent. Cholera has existed for several months at Shanghai and Hankow, from which points it was imported into Japan, appearing

in epidemic form at Nagasaki and Yokohama, in October and November.

Africa.—Cholera, which has been prevailing extensively in the interior of Morocco, has reached the coast cities. Sixty to 100 deaths daily, are reported at Mogador.

ROBERT WHITE, JR.,

Assistant Surgeon, U. S. M.-H. S.,

(For the Surgeon-General, U. S. M.-H. S., in his absence.)

No. 26.

OFFICE SURGEON-GENERAL, U. S. M. H.-S.,

Washington, January 8, 1879.

Bulletin of Public Health, issued by the Surgeon-General, U. S. Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended January 4, 1879.

Yellow-Fever.—The present issue of the bulletin is the first for which no cases or deaths were reported.

Massachusetts.—Week ended December 28: In eighteen cities and towns, with an aggregate population of 808,200, there were 355 deaths, an average annual ratio per 1,000 of 22.90, the rate varying from four at Pittsfield and Fitchburgh to 16 at Cambridge and Springfield, 21 at Fall River, 23 at Lowell, 26 at Boston, 27 at Gloucester, and 28 at Worcester, to 30 at Salem and Somerville. The principal "zymotic" diseases caused 20 per cent. of all the deaths, 46 being from diphtheria and croup, 10 from scarlet-fever; phthisis caused 58 deaths; pneumonia, 39 deaths.

Boston.—Week ended January 4: Deaths from all causes, 178; ratio, 26. Twenty-six cases of scarlet-fever, 10 deaths; 24 cases of diphtheria, nine deaths; 39 deaths from phthisis, 15 from pneumonia, 10 from bronchitis.

New York.—Week ended January 4: Total deaths, 555; annual ratio, 26.4. Eighty-five deaths from phthisis, 64 from pneumonia, 19 from bronchitis, 53 from scarlet-fever, 33 from diphtheria, the latter disease very prevalent.

Brooklyn.—Week ended January 4: Total deaths reported, 240; ratio, 22.11. Fifty-seven cases of scarlet-fever, seven deaths; 49 cases of diphtheria, 12 deaths; 11 deaths from croup, 24 from phthisis, 30 from acute pulmonary diseases.

Baltimore.—Week ended January 4: Total deaths, 137; annual ratio, 19.5. Twenty-eight deaths from phthisis, 24 from pneumonia, nine from

diphtheria, two from scarlet-fever. Total deaths in 1878, 6,733; a ratio of 18.4 to each 1,000 of the population.

District of Columbia.—Month of December: Total deaths, 321; annual ratio, 24. Death rate in the white population, 19; in the colored, 33.7. "Zymotic" diseases caused 32 deaths; phthisis, 61; pneumonia, 30; bronchitis, 10.

Richmond.—Two weeks ended January 4: Fifty-four deaths; annual ratio, 17.7. Seven deaths from phthisis, nine from scarlet-fever, three from diphtheria.

Charleston.—Week ended December 28: Total deaths, 34; annual ratio, 35.

Cleveland.—January 1 to 4: Deaths, 38. Nine cases of diphtheria; seven deaths.

Milwaukee.—Week ended December 23: Total deaths, 25; annual ratio, 11.5. Diphtheria prevalent.

Cincinnati.—Two weeks ended December 28: Total deaths, 234; annual ratio, 21.7. "Zymotic" diseases caused 33 per cent. of the deaths, 51 being from scarlet-fever; 14 from diphtheria. Phthisis caused 20 deaths; acute pulmonary diseases, 33 deaths.

Chicago.—Two weeks ended December 28: Total deaths, 281; annual ratio, 16. Twenty-five deaths from phthisis, 44 from acute pulmonary diseases, 23 from diphtheria, and six from scarlet-fever. Seven thousand four hundred and twenty-two deaths were reported in 1878—a ratio of 16 per 1,000.

St. Louis.—Week ended December 22: Total deaths, 101; annual ratio, 10. Twenty-eight deaths from "zymotic" diseases. During the yellow-fever epidemic there were 15 deaths from the disease in the city, and 40 deaths at the quarantine station. All but one of these decedents were refugees.

New Orleans.—Week ended December 22: Deaths reported from all causes, 79; an annual ratio of 20. In the white population the death rate was 185; in the colored, 23.

Bermuda.—The United States consul reports that, in a population of over 15,000, there is rarely more than one death per week, and that the Island is remarkably free from all infectious diseases.

Havana.—Week ended January 4: Nine deaths from small-pox; four deaths from yellow-fever.

Great Britain.—Week ended December 14: In twenty large towns, with an aggregate population of 7,270,000, there were 3,844 deaths, an average annual rate of 27.6 per 1,000 of the population. The deaths from scarlet-fever were 177, against 223 and 197 in the two preceding

weeks. The death rate at Portsmouth was 19; Brighton, 22; Plymouth, 28; Sheffield, 28; Manchester, 35.

London.—Week ended December 14: One thousand six hundred and ninety-eight deaths from all causes; annual ratio, 24.8. Diphtheria caused 14 deaths; measles, 34; whooping-cough, 47; scarlet-fever, 46; other fevers, 33. Deaths from acute diseases of respiratory organs, numbered 428, 441, 460, and 501, respectively, for the four weeks preceding December 14. In the latter week, 17 deaths from small-pox occurred, and 300 cases of the disease were estimated to exist in the city, there being 198 cases in the hospitals on December 14. In Deptford, the spread of small-pox has been traced to a "wake" that had been held on the body of a child who had died of the disease.

Liverpool.—Week ended December 14: Total deaths, 384; annual ratio, 38. Forty deaths from scarlet-fever.

Birmingham.—Deaths from all causes, 227; annual ratio, 31. Twenty-three deaths from scarlet-fever.

Dublin.—Week ended December 14: Total deaths, 230; an annual ratio of 38. Acute pulmonary diseases caused 87 deaths; phthisis, 18 deaths; small-pox, eight deaths. One hundred and three cases of the latter disease remained in the hospitals on December 14.

The death rate for the week at Glasgow was 30; Edinburgh, 19; Cork, 28; Londonderry, 22.

Paris.—Week ended December 12: Nine hundred and five deaths annual ratio, 23.7. Diphtheria caused 17 deaths; enteric-fever, 14; small-pox, 4.

Vienna.—Week ended December 7: Three hundred and ninety-six deaths; annual rate, 28.3. Sixteen deaths from small pox; 35 from diphtheria.

German Empire.—Week ended December 7: In one hundred and forty-nine cities, with an aggregate population of 7,365,587, there were 3,425 deaths, an average annual rate of 24.2 per 1,000 of the population. Forty-six per cent. of the deaths were of children under five years of age. There were three deaths from small-pox, 96 from scarlet-fever, 198 from diphtheria, 304 from pneumonia, 483 from phthisis.

Berlin.—Week ended December 7: Total deaths, 493; annual ratio, 24.8. One death from small-pox, 11 from scarlet-fever, 42 from diphtheria, 29 from pneumonia, 57 from phthisis.

Saint Petersburg.—Week ended November 30: Total deaths, 457 annual rate, 35.8. Thirty-five deaths from small-pox, 30 from enteric-fever, 70 from pneumonia, 68 from phthisis. Late advices state that the "plague" has reappeared on the northern shores of the Black Sea,

where it is supposed to have been imported by Cossacks returning from Turkey. Astrakan is the central point of infection, and the Russian health authorities are making vigorous efforts to prevent the extension of the disease.

Calcutta.—Week ended November 9: Total deaths, 365. Cholera caused 15; fevers, 147. Annual ratio, 44.3. Rate at Madras, 45; at Bombay, 32.

In *England*, during the past year, tents have been used for the treatment of cases of scarlet-fever and small-pox, in towns where these diseases prevailed in epidemic form, with most satisfactory effect in arresting their spread.

The latest returns give the death rate at Alexandria as 31; Naples, 23; Rome, 22; Venice, 26; Lisbon, 31; Barcelona, 34; Munich, 30; Hamburg, 27; Cologne, 20; Brussels, 23; Amsterdam, 22; Copenhagen, 23; Stockholm, 16; Warsaw, 27.

ROBERT WHITE, JR.,

Assistant Surgeon, U. S. M.-H. S.,

(For the Surgeon-General, U. S. M.-H. S., in his absence.)

No. 27.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, January 15, 1879.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended January 11, 1879.

Massachusetts.—Week ended January 4: In sixteen cities, with an aggregate population of 712,800, there were 314 deaths, an average annual ratio of 23 per 1,000 of the population. Ratio at Pittsfield, 8.24; Springfield, 15; Worcester, 19; Fall River, 21; Lynn, 24.5; Gloucester, 24.3.

Boston.—Week ended January 11: Deaths from all causes, 168; annual ratio, 23. Thirty-one cases of scarlet-fever, eight deaths; 25 cases of diphtheria, 11 deaths. Thirty-six deaths from phthisis, 26 from pneumonia, seven from bronchitis.

New Haven.—Month of December: Total deaths, 91; annual ratio, 18.2. Twenty per cent. of all the deaths were from "zymotic" diseases. Fourteen deaths from phthisis, eight from pneumonia.

New York.—Week ended January 11: Total deaths, 569; annual ratio, 27.1. Twenty-two deaths from diphtheria, 54 from scarlet-fever, 82 deaths from phthisis, 68 from pneumonia, 28 from bronchitis.

Philadelphia.—Two weeks ended January 11: Total deaths, 672; annual ratio, 20. Twenty-four deaths from diphtheria, 20 from scarlet-fever, 11 from enteric-fever.

Baltimore.—Week ended January 11: One hundred and sixty-two deaths; annual ratio, 23. Eight deaths from diphtheria, four from scarlet-fever, 17 from phthisis, 19 from pneumonia, 13 from bronchitis; 23 decedents whose ages averaged 80 years each.

District of Columbia.—Week ended January 11: Eighty-one deaths; annual ratio, 26. Four deaths from scarlet-fever, three from diphtheria.

Norfolk.—Month of December: Total deaths, 43; annual ratio, 22.4. Seven deaths from phthisis, 15 from acute pulmonary diseases.

Pittsburgh.—Week ended January 4: Total deaths, 49; annual ratio, 17.6. Eight deaths from diphtheria.

Cincinnati.—Week ended January 4: Total deaths, 97; annual ratio, 18. Twenty-four deaths from scarlet-fever, six deaths from diphtheria.

Milwaukee.—Week ended January 4: Total deaths, 44; annual ratio, 19. Twenty-four cases of diphtheria, six deaths.

Salt Lake City.—Month of December: Total deaths, 44; annual ratio, 20. Twenty-two deaths from diphtheria.

New Orleans.—Two weeks ended January 5: Total deaths, 167; annual ratio, 20. Twenty-three deaths from phthisis; 25 from pneumonia and bronchitis; two from diphtheria.

Havana.—Week ended January 11: One death from yellow-fever, 11 deaths from small-pox.

Great Britain.—Week ended December 21: In twenty large towns of England, with an aggregate population of 7,270,000, there were 4,500 deaths; an average annual ratio of 32.3, against 22.6 and 24.4 in the corresponding periods of 1876 and 1877. The excessive mortality was due to the acute pulmonary affections, resulting from the unusually cold weather. The death rate at Portsmouth was 24; Brighton, 31; Birmingham, 31; Sheffield, 34; Bristol, 36; Manchester, 38; Liverpool, 39.

London.—Week ended December 21: Total deaths, 2,133; annual ratio, 31. There were 650 deaths from acute pulmonary diseases; 194 from phthisis; 55 from scarlet-fever; 18 from diphtheria; 14 from small-pox. One hundred and ninety-eight cases of the latter disease remained in the hospitals on December 21.

Dublin.—Week ended December 21: Total deaths, 248; annual ratio, 41. Eighty-seven deaths from acute lung diseases; 15 from small-pox. There was an alarming increase in the number of new cases of the lat-

ter disease during the week, 136 cases remaining in the hospitals December 21.

Paris.—Week ended December 19: One thousand and seven deaths; annual ratio, 26.3. Twenty-three deaths from enteric-fever, 19 from diphtheria, four from small-pox.

German Empire.—Week ended December 14: In one hundred and fifty towns, with an aggregate population of 7,419,000, there were 3,465 deaths, an annual average ratio of 25 per 1,000 of the population. There were 59 deaths from measles, 89 from scarlet-fever, 228 from diphtheria, 481 from phthisis, 401 from acute pulmonary diseases; 48.3 per cent. of all the deaths were children under five years of age.

Berlin.—Week ended December 14: Total deaths, 487; annual ratio, 24.5. Thirty-seven deaths from diphtheria.

Vienna.—Week ended December 14: Total deaths, 408; annual ratio, 29.2. Seven deaths from small-pox, eight from scarlet-fever, 32 from diphtheria. The last advices report the latter disease as very prevalent, and on the increase.

St. Petersburg.—Week ended December 7: Total deaths, 539; annual ratio, 42. Thirty-one deaths from small-pox, 30 from enteric-fever, 12 from scarlet-fever, 10 from diphtheria.

India—Calcutta.—Week ended November 16: Total deaths, 428; annual ratio, 52. Two hundred and one deaths from fevers; 12 from cholera.

Bombay.—Week ended November 19: Four hundred and eighty-six deaths; annual ratio, 31. One hundred and eighty-four deaths from fevers; nine from cholera.

Madras.—Week ended November 8: Total deaths, 325; annual ratio, 42.5. Eight deaths from small-pox; 114 from fevers.

In the Province of the Punjaub, there were 1,317 deaths from small-pox in the month preceding September 21. The disease is now on the decrease. The deaths from fevers in the same period numbered over 30,000, and are increasing.

Brooklyn, N. Y.—Week ended January 11: Two hundred and twenty-four deaths; annual ratio, 20.6. Ninety cases of scarlet fever, 15 deaths; 43 cases of diphtheria, 19 deaths.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, January 22, 1879.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended January 18, 1879.

Boston.—Week ended January 18: Total deaths, 157; an annual ratio of 22 per 1,000 of the population. There were 13 cases of scarlet-fever and four deaths; 25 cases of diphtheria, 19 deaths; 26 deaths from phthisis; 20 from pneumonia; seven from bronchitis.

New York.—Week ended January 18: Total deaths, 632; annual ratio, 30. Sixty-eight deaths from scarlet-fever; 22 from diphtheria; 86 from phthisis; 82 from pneumonia; 42 from bronchitis.

Elmira, N. Y.—Month of December: Total deaths, 52; annual ratio, 28. Twenty-seven deaths from diphtheria.

Philadelphia.—Week ended January 18: Deaths from all causes, 361; annual ratio, 21.5. Scarlet-fever caused six deaths; diphtheria, 12 deaths; enteric-fever, nine deaths; bronchitis, 14 deaths; pneumonia, 37 deaths; phthisis, 60 deaths.

Pittsburgh.—Week ended January 11: Total deaths, 69; annual ratio, 23.4. Seven deaths from diphtheria; one from scarlet-fever.

Baltimore.—Week ended January 18: Deaths from all causes, 163; annual ratio, 23. Scarlet-fever caused four deaths; diphtheria, four; enteric-fever, five; phthisis, 15; pneumonia, 24.

There were 30 decedents whose ages averaged 80 years, one of 113 years.

District of Columbia.—Week ended January 18: Deaths from all causes, 73; annual ratio, 23.7. One death from scarlet-fever; four from diphtheria; 13 from pneumonia.

Cleveland.—Two weeks ended January 18: Total deaths, 78; annual ratio, 19.2. Sixteen cases of diphtheria, six deaths.

Chicago.—Week ended January 11: Total deaths, 148; annual ratio, 16.7. Six deaths from scarlet-fever, nine from diphtheria, seven from bronchitis, 14 from pneumonia, 15 from phthisis.

Cincinnati.—Week ended January 11: Total deaths, 110; annual ratio, 20.5. Forty-three per cent. of deaths were due to "zymotic" diseases, scarlet-fever causing 25.

Saint Louis.—Three weeks ended January 18: Total deaths, 344; an nual ratio, 12.2. Thirty-six deaths from phthisis, 47 from pneumonia, four from scarlet-fever, eight from diphtheria. In 1878, the rate of mortality was 12 per 1,000 of the population.

San Francisco.—Week ended January 10: Total deaths, 129; annual ratio, 22. Scarlet-fever caused five deaths; diphtheria, seven; phthisis, 23; pneumonia, 22.

New Orleans.—Week ended January 12: One hundred and twenty-four deaths; annual ratio, 30.7. Five deaths from diphtheria, 12 from phthisis, 12 from pneumonia.

Havana.—Week ended January 18: Yellow-fever caused three deaths; small-pox, nine.

Great Britain.—Week ended December 28: There were 4,962 deaths in twenty-three large towns, with an aggregate population of 8,374,000, an average annual rate of 31.

London.—Week ended December 28: Total deaths, 1,900; annual ratio, 27.7. Measles caused 34 deaths; scarlet-fever, 48; diphtheria, 22; whooping-cough, 62. Acute pulmonary diseases caused 634 deaths; small-pox, 13. The number of cases of the latter disease has steadily increased during the past three months, 225 remaining in the hospitals on December 28.

During 1878, there were 83,694 deaths in London, an annual rate of 23.5 per 1,000, against 22.3 in 1876 and 22.9 in 1877. Seven principal preventable diseases caused 18 per cent. of all the deaths. Whooping-cough caused 4,446 deaths; diarrhoea, 3,651; scarlet-fever, 1,792; measles, 1,510; fevers, 1,361; small-pox, 1,416; diphtheria, 558.

Dublin.—Week ended December 28: Total deaths, 238; annual ratio, 38. Four deaths from scarlet-fever; five from measles; 96 from acute lung diseases; 16 from phthisis; 19 from small-pox; making 550 deaths from the latter disease during the year 1878. One hundred and twenty-two cases remained in the hospitals on December 28; but the number of new cases during the week had materially lessened.

Galway.—During the week, there were seven deaths from small-pox. Mortality rate for the week at Liverpool, 37; Manchester, 42; Birmingham, 33; Sheffield, 27; Edinburgh, 24; Glasgow, 36.

Paris.—Week ended December 26: Total deaths, 938; annual ratio, 24.6. Enteric-fever caused 20 deaths; diphtheria, 14; small-pox, five.

Vienna.—Week ended December 21: Total deaths, 389; annual ratio, 28. Thirty-one deaths from diphtheria, 11 from small-pox.

Saint Petersburg.—Week ended December 21: Total deaths, 526; annual ratio, 41. Thirty-five deaths from small-pox, 28 from enteric and typhus-fevers.

German Empire.—Week ended December 21: In one hundred and fifty cities and towns, with an aggregate population of 7,435,324, there were 3,709 deaths; an average annual rate of 26 per 1,000 of the popu-

lation. Forty-seven per cent. of the deaths occurred in children under five years of age; small-pox caused one death; 58 from measles; 87 from scarlet-fever; 218 from diphtheria; 489 from phthisis; 482 from acute lung diseases.

Calcutta.—Week ended November 23: Deaths, 407; annual ratio, 50. Cholera caused 21 deaths; "fevers," 204.

Bombay.—Seven deaths from cholera, 195 from "fevers."

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 29.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, January 29, 1879.

Bulletin of the Public Health, issued by the Surgeon-General, U. S. Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended January 25, 1879.

Yellow-fever.—The existence of two cases at Handsborough, Miss., on January 17, was reported by the attending physician.

Boston.—Week ended January 25: Deaths from all causes, 158; an annual ratio of 22.5 per 1,000 of the population. There were 22 cases of scarlet-fever, and 11 deaths; 32 cases of diphtheria, 12 deaths. Twenty-five deaths from phthisis, 14 from pneumonia, six from bronchitis.

Brooklyn.—Two weeks ended January 25: Total deaths, 507; annual ratio 23.5. One hundred and thirty-one cases of scarlet-fever, 32 deaths; 98 cases of diphtheria, 20 deaths. Forty-eight deaths from phthisis, 92 from acute lung diseases.

Philadelphia.—Week ended January 25: Deaths from all causes, 324; annual ratio, 19.2. There were six deaths from scarlet-fever, 10 from diphtheria, 11 from enteric-fever, 58 from phthisis.

Baltimore.—Week ended January 25: Total deaths, 159; annual ratio, 22.6. Two deaths from enteric-fever, two from scarlet-fever, six from diphtheria, 28 from phthisis, 21 from pneumonia.

District of Columbia.—Week ended January 25: Total deaths, 76; annual ratio, 24. Five deaths from scarlet-fever, two from diphtheria, one from enteric-fever.

Cleveland.—Week ended January 25: Total deaths, 49; annual ratio, 16. One death from scarlet-fever, eight from diphtheria.

Milwaukee.—Three weeks ended January 25: Total deaths, 126; annual ratio, 18.5. Fifty-eight cases of diphtheria, 18 deaths.

Chicago.—Week ended January 18: Total deaths, 161; rate, 18. Six deaths from scarlet-fever; 15 from pneumonia; 16 from phthisis; 28 from acute pulmonary diseases.

Saint Louis.—Week ended January 25: Total deaths, 135; annual ratio, 14. Five deaths from diphtheria; 25 from pneumonia; 14 from phthisis.

San Francisco.—Week ended January 17: Total deaths, 93; rate, 16. Two deaths from scarlet-fever; two from diphtheria; four from enteric-fever; 11 from phthisis; 18 from pneumonia.

Harana.—Week ended January 25: Three deaths from yellow-fever; 12 deaths from small-pox.

Great Britain.—Week ended January 4: The average annual death rate for the twenty-three large cities of the Kingdom was 29 per 1,000; being 20 at Brighton and Portsmouth; 26 at Sheffield; 30 at Birmingham; 33 at Liverpool; 36 at Manchester; 25 at Edinburgh; 30 at Glasgow. The recent excessive mortality from acute pulmonary disease is diminishing.

London.—Week ended January 4: Total deaths, 1,900; annual ratio, 27.4. Measles caused 34 deaths; scarlet-fever, 29; diphtheria, 16; whooping-cough, 65; small-pox, 13. Of the latter disease 254 cases remained in the hospitals on January 4. There were 555 deaths from acute pulmonary diseases.

Dublin.—Week ended January 4: Total deaths, 306; an annual ratio of 51 per 1,000 of the population. One hundred and four of the deaths resulted from acute lung diseases; four from scarlet-fever; one from diphtheria; 22 from small-pox. The death rate has risen with great rapidity, and small-pox prevails among all classes of the population. Seventy-two new cases were received into the hospitals during the week.

Paris.—Week ended January 2: Total deaths, 947; annual ratio, 25. Seven deaths from small-pox.

Vienna.—Week ended December 28: Total deaths, 382; annual ratio, 27.3. Fifteen deaths from small-pox; 22 from diphtheria.

German Empire.—Week ended December 28: In one hundred and fifty cities, with an aggregate population of 7,427,000, there were 3,672 deaths; an average of 25.7 per 1,000. Forty-five per cent. of the deaths occurred in children under five years of age. Diphtheria caused 212 deaths; scarlet-fever, 93; measles, 57; whooping-cough, 58; enteric-fever, 56; phthisis, 508; acute lung diseases, 412. Death rate at Berlin, 26; Munich, 32; Dresden, 24; Hamburgh, 23.

Saint Petersburg.—Week ended December 21: Total deaths, 589;

annual ratio, 46. Small-pox caused 37 deaths, enteric and typhus-fevers, 42 deaths. The disease prevailing in Southern Russia has been definitely recognized by the Russian health authorities as the plague. At Astrakan, there were 195 cases, of which 143 proved fatal during the first two days of January. Precautions are being taken by most of the European governments against its introduction into their respective countries.

The report of the Government inspector, appointed to investigate the cause of a recent epidemic of diphtheria in North London, traces the source of infection to the milk supplied to the affected households. None of the ordinary means of infection of milk by polluted water, or by the vicinage of diphtheritic infection in any discoverable form, could be ascertained, and the report suggests the probability of the infection being derived from some pathological condition existing in the cows.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

No. 30.

OFFICE OF SURGEON-GENERAL, U. S. M.-H. S.,
Washington, February 5, 1879.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended February 1, 1879.

Boston.—Week ended February 1: Deaths from all causes, 144; an annual ratio of 20.5 per 1,000 of the population. Twenty-seven cases of scarlet-fever, four deaths; 23 cases of diphtheria, nine deaths; 27 deaths from phthisis; 27 from pneumonia and bronchitis.

New York.—Two weeks ended February 1: Total deaths, 1,363; annual ratio, 29.6. Seven deaths from enteric-fever, 108 from scarlet-fever, 39 from diphtheria, 201 from phthisis, 241 from acute pulmonary diseases.

Brooklyn.—Week ended February 1: Total deaths, 232; annual ratio, 21.5. Thirty-one cases of scarlet-fever, 12 deaths; 37 cases of diphtheria, nine deaths; 29 deaths from phthisis; 51 from acute lung diseases.

On account of the prevalence of small-pox in various foreign cities, in constant communication with ports of the United States, the city has authorized the expenditure of \$5,000 for vaccination.

Rochester.—Month ended January 31: Total deaths, 125; annual ratio,

18.3. One death from enteric-fever, one from scarlet-fever, one from diphtheria. Acute pulmonary diseases prevalent.

Philadelphia.—Week ended February 1: Total deaths, 391; annual ratio, 23. Nine deaths from enteric-fever, 13 from scarlet-fever, six from diphtheria, 69 from phthisis, 54 from pneumonia.

Baltimore.—Week ended February 1: Total deaths, 158; annual ratio, 22.5. Three deaths from enteric-fever, four from diphtheria, 27 from phthisis, 27 from pneumonia.

District of Columbia, (including Washington and Georgetown).—Week ended February 1: Total deaths, 100; annual ratio, 32.5. Four deaths from scarlet-fever, one from diphtheria, 12 from phthisis.

Pittsburgh.—Week ended February 1: Total deaths, 46; annual ratio, 16.5. Seven cases of enteric-fever, two deaths; seven cases of scarlet-fever, one death; 10 cases of diphtheria, five deaths.

Cleveland.—Week ended February 1: Total deaths, 37; annual ratio, 12. Eight cases of scarlet-fever, three deaths; 11 cases of diphtheria, five deaths.

Cincinnati.—Three weeks ended February 1: Total deaths, 346; annual ratio, 21. Fifty deaths from scarlet-fever, 20 deaths from diphtheria.

Chicago.—Two weeks ended February 1: Total deaths, 361; annual ratio, 15. Five deaths from scarlet-fever, 12 from diphtheria, five from enteric-fever.

St. Louis.—Week ended February 1: Total deaths, 111; annual ratio, 12. Five deaths from enteric-fever, two deaths from diphtheria.

San Francisco.—Week ended January 25: Total deaths, 111; annual ratio, 19. Two deaths from enteric-fever, two from scarlet-fever, four from diphtheria.

New Orleans.—Two weeks ended January 26: Total deaths, 270; annual ratio, 33.4. Forty-five deaths from phthisis, 68 deaths from acute pulmonary diseases. No deaths from diphtheria or scarlet-fever reported.

Havana.—Week ended February 1: Yellow-fever caused three deaths, small-pox seven.

Great Britain.—Two weeks ended January 18: In twenty-three cities, with an aggregate population of 8,503,000, there were 9,182 deaths; an average annual ratio of 28.5 per 1,000. The death rate at Brighton was 17; Portsmouth, 19; Sheffield, 24.5; Birmingham, 30; Liverpool, 34; Manchester, 35; Edinburgh, 23; Glasgow, 27.5; Dublin, 46.5. Scarlet-fever prevalent in Birmingham and Liverpool.

London.—In the two weeks there were 3,820 deaths; annual ratio,

27.5. Measles caused 49 deaths; scarlet-fever, 100; diphtheria, 15; whooping-cough, 133; acute pulmonary diseases, 1,293. Small-pox caused 24 deaths; nearly 300 cases remained in the hospitals on January 18.

In *Dublin*, small-pox is on the increase, over 200 new cases and 45 deaths having occurred in the fortnight.

Paris.—Week ended January 16: Total deaths, 1,039; 11 from small-pox; annual ratio, 27.

German Empire.—Week ended January 4: In one hundred and fifty cities, with an aggregate population of 7,541,000, there were 3,748 deaths; an average annual ratio of 25.8. Measles caused 44 deaths; scarlet-fever, 75; diphtheria, 186; whooping-cough, 57; phthisis, 510; acute lung affections, 427.

St. Petersburg.—Week ended January 4: Total deaths, 574; annual ratio, 44. Fifty-four deaths from small-pox.

Rio de Janeiro.—Four weeks ended December 28: Total deaths, 863; annual ratio, 39. Yellow-fever caused 10; "pernicious" fever, 20; small-pox, 137 deaths. Small-pox has been raging with great intensity in the northern provinces of Brazil, especially in *Manáos* and *Ceará*. In *Fortalez*, the capital of the latter province, 1,077 persons died from the disease on November 28 and 29, the total deaths for the month amounting to 11,075, small-pox causing 9,844. The regular population of the city is 23,000, and the usual mortality about 900 per annum. From the 1st to the 11th of December, the deaths from small-pox numbered 7,547. The present population of *Fortalez* is greatly in excess of the usual number, on account of the influx of starving refugees from the interior, where famine prevails. The want of food, care, and shelter, and of medical attendance, has greatly favored the spread of the epidemic, which, up to December 13, was unchecked. The "black plague" has also prevailed to some extent. During December, at *Bahia*, there were 18 deaths from small-pox, and at *Pernambuco* 185 from small-pox, five from yellow-fever; annual ratio, 58.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, February 12, 1879.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended February 8, 1879.

Boston.—Week ended February 8: Deaths from all causes, 144; annual ratio, 20.5. Twenty-one cases of scarlet-fever, five deaths; 22 cases of diphtheria, ten deaths; nine deaths from bronchitis, 13 from pneumonia, 28 from phthisis.

Providence.—Week ended February 8: Total deaths, 30; annual ratio, 15.6. One death from enteric-fever; five from scarlet-fever; five from acute pulmonary diseases; nine from phthisis.

New Haven.—Two weeks ended February 8: Total deaths, 37; annual ratio, 16. No deaths from scarlet-fever or diphtheria reported.

New York.—Week ended February 8: Total deaths, 602; annual ratio, 28.7. Four deaths from enteric-fever; 69 from scarlet-fever; 21 from diphtheria; 102 from phthisis; 105 from acute pulmonary diseases.

Brooklyn.—Week ended February 8: Total deaths, 234; annual ratio, 21.7. One case of enteric-fever, one death; 77 cases of scarlet-fever, six deaths; 41 cases of diphtheria, 12 deaths; croup caused eight deaths; acute respiratory diseases, 37; phthisis, 31.

Philadelphia.—Week ended February 8: Total deaths, 353; annual ratio, 20. Enteric-fever caused two deaths; scarlet-fever, nine; diphtheria, eight; whooping-cough, two; acute pulmonary diseases, 63; phthisis, 56.

Baltimore.—Week ended February 8: Total deaths, 134; annual ratio, 19. Six deaths from enteric-fever; seven from scarlet-fever; four from diphtheria; 25 from pneumonia and bronchitis; 28 from phthisis.

District of Columbia, (including Washington and Georgetown.)—Total deaths, 82; annual ratio, 26.6. Enteric-fever, scarlet-fever, and diphtheria, each caused one death; acute pulmonary diseases, 17; phthisis, 13 deaths.

Louisville, Ky.—Week ended February 8: Total deaths, 60; annual ratio, 19.5. Two deaths from scarlet-fever; one from croup; 11 from acute pulmonary diseases; 13 from phthisis.

New Orleans.—Week ended February 2: Total deaths, 92; annual ratio, 22.6. One death from typhus-fever; one from diphtheria; 24 from acute lung diseases; 11 from phthisis.

Salt Lake City.—Month of January: Total deaths, 78; annual ratio, 37. Twenty-three deaths from diphtheria; four from croup; three from scarlet-fever.

San Francisco.—Week ended February 1: Total deaths, 81; annual ratio, 13.8. Two deaths from enteric-fever; four from diphtheria; 15 from pneumonia; 12 from phthisis.

Havana.—Week ended February 8: Yellow-fever caused three deaths; small-pox, eight deaths. During 1878, there were 8,594 deaths in the resident population of 195,437; an annual ratio of 44 per 1,000. There were 2,913 additional deaths among the troops, the number of whom is unknown; 2,553 deaths occurred in July and August, 878 being from yellow-fever. During the year, phthisis caused 1,714 deaths; enteric-fever, 155; "malarial" fevers, 416; small-pox, 1,225; yellow-fever, 1,559. The number of deaths from yellow-fever did not differ essentially from the annual average number. The disease is endemic in the Island, and is confined, with rare exceptions, to persons of the Caucasian race, not born on, or acclimated in, the Island. The natives and persons of the African and Asiatic races are considered to be nearly exempt from it. The summer mortality is nearly double that of the winter months.

Rio de Janeiro.—Week ended January 4: Total deaths, 229; annual ratio, 39. Small-pox caused 21 deaths; yellow-fever, six; "pernicious" fever, four. The latest advices state that small-pox is still increasing in the northern provinces of Brazil; 21,473 deaths from the disease occurred in Fortalez between the 1st and 20th of December. (*Vide* preceding number of Bulletin.)

Great Britain.—Week ended January 25: In twenty-three cities, with an aggregate population of 8,503,000, there were 4,381 deaths; an average annual ratio of 27 per 1,000 of the population. The death rate at Plymouth was 20; Portsmouth, 21; Birmingham, 24; Brighton, 25; Sheffield, 27; Liverpool, 31; Manchester, 34; Edinburgh, 21; Glasgow, 29; Dublin, 43. Small-pox caused 19 deaths in the latter city.

In *London*, during the week, there were 1,812 deaths; annual ratio, 26. Measles caused 18 deaths; scarlet-fever, 46; diphtheria, seven; whooping-cough, 71; fevers, 25; diarrhoea, 13. The deaths from small-pox increased to 24, and the number of cases in the hospitals to 311.

St. Petersburg.—Week ended January 11: Total deaths, 601; annual ratio, 46.7. Small-pox caused 48 deaths; enteric and typhus-fevers, 48. The official reports of the Russian medical inspectors, sent to Astrakan, state that several villages have been depopulated by the prevailing disease. In Vetlianka, a village of 1,800 inhabitants, there had been 300 cases, with 273 deaths, up to January 12. The remainder of the

people had fled. The reports also state that the excessive mortality, over 90 per cent., is caused by want of food and bad sanitary conditions. Quarantines have been established by the Austrian and Italian governments, and the health authorities of British ports have directed careful sanitary inspection of all vessels arriving from the Black Sea.

Paris.—Week ended January 23: One thousand and seventy-one deaths; annual ratio, 28. Twelve deaths from small-pox.

Vienna.—Week ended January 18: Three hundred and ninety-seven deaths; annual ratio, 28. Thirteen deaths from small-pox.

An official telegram of February 11 states that the schooner "White Wing," from the Island of Roatan, has been quarantined at Key West, the captain being sick with yellow-fever.

JNO. M. WOODWORTH,

Surgeon-General, U. S. M.-H. S.

No. 32.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,

Washington, February 19, 1879.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended February 15, 1879.

Boston.—Week ended February 15: Deaths from all causes, 155; an annual ratio of 22.1 per 1,000 of the population. Eighteen cases of scarlet-fever, two deaths; 22 cases of diphtheria, nine deaths; bronchitis caused six deaths; pneumonia, 19; phthisis, 26.

Providence.—Week ended February 15: Total deaths, 41; annual ratio, 21. Five deaths from scarlet-fever; five from diphtheria. "Scarlet-fever prevalent and increasing."

New York.—Week ended February 15: Total deaths, 554; annual ratio, 26.3. Sixty-nine deaths from scarlet-fever; 12 from diphtheria; 18 from whooping-cough; 35 from bronchitis; 55 from pneumonia; 101 from phthisis.

Hudson County, N. J., (including Hoboken and Jersey City).—Week ended February 15: Total deaths, 61; annual ratio, 16. Enteric-fever caused three deaths; scarlet-fever, two; diphtheria, three; acute lung diseases, nine; phthisis, 10.

Brooklyn.—Week ended February 15: Total deaths, 222; annual ratio, 26.4. Five cases of enteric-fever, two deaths; 71 cases of scarlet-fever, nine deaths; 44 cases of diphtheria, 11 deaths; 40 deaths from acute respiratory diseases; 33 from phthisis.

Buffalo.—Week ended February 15: Total deaths, 31; annual ratio, 12. Four deaths from scarlet-fever; two from diphtheria.

Philadelphia.—Week ended February 15: Total deaths, 349; annual ratio, 21. Enteric-fever caused five deaths; scarlet-fever, nine; diphtheria, nine; acute pulmonary diseases, 71; phthisis, 60.

Pittsburgh.—Two weeks ended February 15: Total deaths, 121; annual ratio, 21.7. Enteric-fever caused five deaths; scarlet-fever, three; diphtheria, 11.

Baltimore.—Week ended February 15: Total deaths, 160; annual ratio, 22.8. One death from enteric-fever; six from scarlet-fever; ten from diphtheria; 31 from acute pulmonary diseases; 25 from phthisis.

District of Columbia, (including Washington and Georgetown).—Week ended February 15: Total deaths, 87; annual ratio, 28.3. Scarlet fever caused three deaths; diphtheria, two; acute pulmonary diseases, 18; phthisis, 18.

Chicago.—Two weeks ended February 15: Total deaths, 244; annual ratio, 14. Enteric-fever caused six deaths; scarlet-fever, five; diphtheria, 16; acute lung diseases, 42.

Milwaukee.—Week ended February 15: Total deaths, 40; rate, 18. Five deaths from diphtheria.

Louisville.—Week ended February 15: Total deaths, 58; annual ratio, 19. Diphtheria caused one death; acute lung affections, 16; phthisis, eight.

Saint Louis.—Two weeks ended February 5: Total deaths, 215; annual ratio, 11.2. Enteric-fever caused one death; scarlet-fever, two; diphtheria, five; phthisis, 36; pneumonia, 29.

Richmond.—Two weeks ended February 15: Total deaths, 67; annual ratio, 22. Scarlet-fever caused eight deaths; acute lung diseases, nine; phthisis, eight.

Savannah.—Two weeks ended February 15: Total deaths, 41; annual ratio, 38. Death rate among the negroes twice as great as among the whites.

Mobile.—Week ended February 15: Seventeen deaths; annual ratio, 22. One death from diphtheria. "City very healthy, with exception of epidemic of influenza."

New Orleans.—Week ended February 9: Total deaths, 87; annual ratio, 22. Acute lung diseases caused 14 deaths; phthisis, 17. No deaths reported from scarlet-fever or diphtheria.

San Francisco.—Week ended February 7: Total deaths, 101; annual ratio, 17.5. Enteric-fever caused two deaths; scarlet-fever, one; diphtheria, four; acute lung diseases, 18; phthisis, 15.

Havana.—Week ended February 15: Yellow-fever caused one death; small-pox, 13.

Great Britain.—Week ended February 1: The average death rate of the twenty-three large cities, was 28; Dublin, 49; Liverpool, 36; Manchester, 35; Glasgow, 29; Edinburgh, 25; Sheffield, 25.

London.—One thousand eight hundred and twenty-one deaths; annual ratio, 26. Measles caused 23 deaths; scarlet-fever, 33; diphtheria, 14; whooping-cough, 64; acute lung diseases, 541. Twenty-eight deaths from small-pox in London; 21 in Dublin.

German Empire.—Two weeks ended January 18: In one hundred and fifty cities, there were 7,446 deaths, an average annual rate of 26 per 1,000: Measles caused 94 deaths; scarlet-fever, 184; diphtheria, 352; whooping-cough, 105; acute lung diseases, 666; phthisis, 1,015.

Paris.—January 24 to 30: Deaths, 1,109. Small-pox caused eight; diphtheria, 28; enteric-fever, 21.

Vienna.—January 19 to 25: Deaths, 421; rate, 30. Small-pox caused 13 deaths; diphtheria, 21.

Saint Petersburg.—January 12 to 18: Deaths, 623; rate, 48. Small-pox caused 58 deaths.

Rio de Janeiro.—Two weeks ended January 18: Deaths, 393; annual ratio, 34. Yellow-fever caused 30 deaths; small-pox, 30; enteric-fever, 11; "pernicious" fever, 20. No deaths from diphtheria or scarlet-fever reported.

The United States consul at Pernambuco reports that in the interior of the province of Ceará, a severe drought has prevailed for two years and a half, no rain having fallen during that time. The excessive dryness caused the disappearance of the innumerable small streams which furnished the whole water supply of the country; the consequent death of nearly all the cattle and sheep; and the complete destruction of the usual means of subsistence of the population, which is wholly an agricultural one. The people have been reduced to subsistence on roots, cotton-pods, reptiles, and any living or dead thing that would sustain life, some resorting even to cannibalism. In the winter of 1878, small-pox appeared, in epidemic form, and caused a frightful mortality among the starving people. A general flight of the people from the interior to the coast cities occurred. The normal population of 25,000 in Fortaleza, the capital, was quickly raised to 100,000, the squares of the city being filled with thousands of unsheltered people, dying of disease and starvation. One half of the original population of the city have died of small-pox. In the new cemetery of Lagoa Funda, opened in the middle of last year, there were 60,000 interments up to January 1. The

number of burials from small-pox alone, between November 1 and January 1, in this cemetery, were 24,470; the total interments in the city, for the two months, being 31,571. At Parahyba, 12,000 refugees, out of 15,000, who had fled to the port, died; and similar distressing accounts are given of the other coast cities. The consul estimates the usual population at 900,000, of whom 500,000 have died of disease and starvation. The Brazilian government have expended \$10,000,000 for the relief of the sufferers. At last advices, slight rains have fallen in the interior, and it is believed that the worst period of the scourge has been passed.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

No. 33.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, February 26, 1879.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended February 22, 1879.

Boston.—Week ended February 22: Deaths from all causes, 139; an annual ratio of 20 per 1,000 of the population. Fourteen cases of scarlet-fever, six deaths; 20 cases of diphtheria, seven deaths; bronchitis caused seven deaths; pneumonia, 10; phthisis, 31.

Providence.—Week ended February 22: Total deaths, 29; annual ratio, 15. One death from diphtheria; two from scarlet-fever.

New York.—Week ended February 22: Total deaths, 551; annual ratio, 26.3. Three deaths from enteric-fever; 50 from scarlet-fever; 15 from diphtheria; 18 from croup; 91 from pneumonia and bronchitis; 92 from phthisis.

Brooklyn.—Week ended February 22: Total deaths, 210; ratio, 19.34. Eighty-three cases of scarlet-fever, nine deaths; 40 cases of diphtheria, 11 deaths; three deaths from enteric-fever; 31 from acute pulmonary diseases; 26 from phthisis.

Buffalo.—Week ended February 22: Total deaths, 36; annual ratio, 13. Four deaths from scarlet-fever; five from diphtheria; two from enteric-fever; 16 from phthisis.

Philadelphia.—Week ended February 22: Total deaths, 353; annual ratio, 21.2. Enteric-fever caused 10 deaths; scarlet-fever, seven; diph-

theria, 15; whooping-cough, four; acute pulmonary affections, 55; phthisis, 55. "Pulmonary affections prevalent; diphtheria increasing."

Pittsburgh.—Week ended February 22: Total deaths, 45; annual ratio, 16. One death from enteric-fever; one from scarlet-fever; six from diphtheria.

Baltimore.—Week ended February 22: Total deaths, 131; annual ratio, 18.66. Enteric-fever caused three deaths; scarlet-fever, three; diphtheria, three; croup, six; acute pulmonary diseases, 22; phthisis, 29.

District of Columbia.—Week ended February 22: Total deaths, 75; annual ratio, 24.3. Enteric-fever caused two deaths; scarlet-fever, six; diphtheria, one; acute pulmonary diseases, 13; phthisis, 13.

Hudson County, N. J., (including Jersey City and Hoboken.)—Week ended February 22: Total deaths, 71; annual ratio, 19.6. Scarlet-fever caused six deaths; diphtheria, four; acute lung affections, 13; phthisis, eight.

Richmond.—Week ended February 22: Total deaths, 29; ratio, 18.20. Six deaths from scarlet-fever.

Cincinnati.—Week ended February 22: Total deaths, 101; annual ratio, 19; 13 deaths from scarlet-fever; one from diphtheria.

Saint Louis.—Week ended February 22: Total deaths, 100; annual ratio, 11.4. Enteric-fever caused two deaths; diphtheria, one death.

San Francisco.—Week ended February 14: Total deaths, 85; annual ratio, 14.5. Enteric-fever caused two deaths; diphtheria, three; pneumonia, 16; phthisis, eight.

Mobile.—Week ended February 22: Total deaths, 21; annual ratio, 27. Acute lung diseases, four deaths.

New Orleans.—Two weeks ended February 23: Total deaths, 189; annual ratio, 23.4. Diphtheria caused three deaths; acute lung diseases, 29; phthisis, 39.

Island of Bermuda.—In a population of 15,300, during the six weeks ended February 18, there were 15 deaths, over 50 per cent. being of persons over 80 years of age.

Havana.—Week ended February 22: Yellow-fever caused one death; small-pox, 13.

Small-pox is very prevalent in Cuba, Brazil, Dublin, London, Saint Petersburg, and the ports of India, and less so at Buda Pesth, Vienna, Paris, Barcelona.

The Spanish quarantine authorities report that cholera exists, and is increasing in Turkey and Asia.

On account of the extremely virulent and contagious character of

the disease that has prevailed in southern Russia, and the evidence pointing to its introduction from the East by commercial traffic, it is recommended that the health authorities of American ports exercise a close supervision over the importation of rags and similar substances, known to be effective carriers of contagion, arriving on ships from the Black Sea and Mediterranean ports.

From the reports of the American diplomatic agents, and other official sources, sufficient facts have been gathered to strongly establish the probability of the epidemic disease prevailing in Southern Russia being a limited, but very virulent, outbreak of plague, and not simply malignant typhus, as stated in the first official reports of the Russian medical officers. True, plague has prevailed for two years in portions of Persia that were in constant communication with the villages of Astrakan, where the disease first appeared. The report of the chief medical officer of Astrakan states that an intermittent-fever, accompanied with suppurating glandular swellings, prevailed at Wetlyanka, in November, 1878. The tendency of the disease was towards recovery up to December 1, when the fever assumed a malignant, paroxysmal type, causing death in from twelve to forty-eight hours. Up to December 1, the mortality averaged nearly fifty per cent., then rapidly increased until, on the 29th, it had attained one hundred per cent., death resulting in every case. The most approved treatment was employed, without benefit. Nearly all who came in contact with the sick, died, including seven army surgeons, the priest, the nuns who nursed the sick, and the Cossacks who buried the dead. Early in January, the Government established a military cordon around the infected villages, in the valley of the Volga. Up to February 1, no authentic cases had been reported outside of this district. The Governor of Astrakan has been directed to burn the infected places, if necessary, the inhabitants to be removed to other quarters, within a quarantine circle, and compensated. The German and Austrian governments have prohibited the importation of skins, furs, and rags, from Russia, and railroad cars arriving from thence are disinfected at the frontiers. At the last official advices, the virulence of the disease was diminishing at all the infected points.

JNO. M. WOODWORTH,

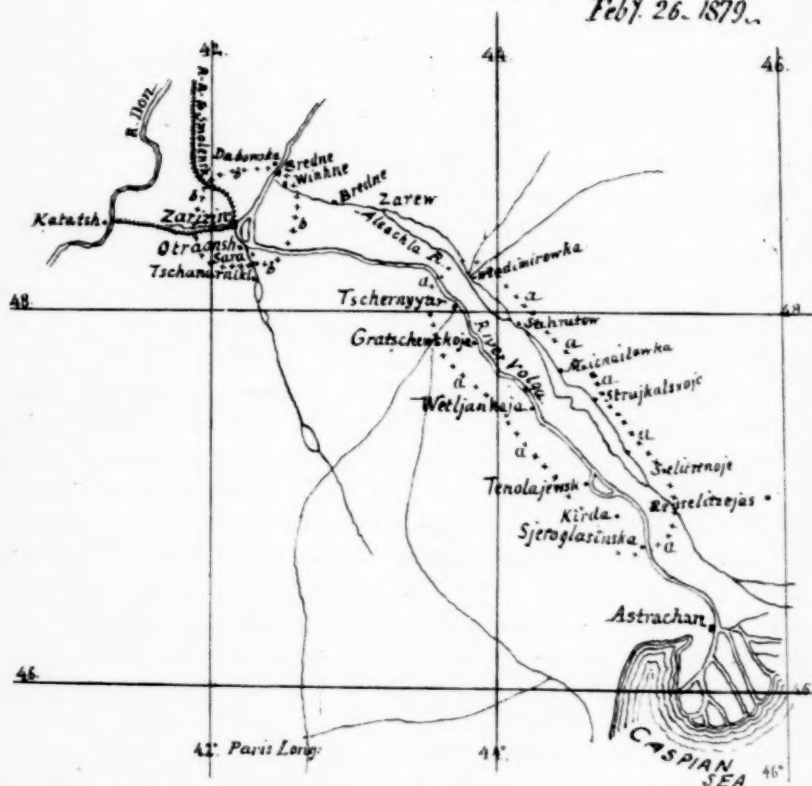
Surgeon-General, U. S. M.-H. S.

See accompanying map of infected district in the valley of the Volga.

Bulletin of the Public Health.

Washington, D.C.

Feb. 26, 1879.



Map of the District infected by Plague.

The lines *a-a* represent the military Cordon drawn around the infected villages: and *b-b* the protective Cordon, maintained around Zarigin, - an important Commercial point, and terminus of the Russian Rail-road system. The village of Wotjankaja was the original and principal centre of infection.

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No. 34.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, March 5, 1879.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended March 1, 1879.

Boston.—Week ended March 1: Deaths from all causes, 145; an annual ratio of 21 per 1,000 of the population. Twenty-eight cases of scarlet-fever, two deaths; 23 cases of diphtheria, 13 deaths. Enteric-fever caused two deaths; bronchitis, three; pneumonia, 18.

Providence.—Week ended March 1: Total deaths, 53; annual ratio, 27.5. Ten deaths from acute pulmonary diseases, 11 from phthisis, one from diphtheria. Very slight prevalence of zymotic disease.

New York.—Week ended March 1: Total deaths, 600; annual ratio, 28.6. Enteric-fever caused two deaths; scarlet-fever, 44; diphtheria, 21; croup, 12; whooping-cough, 15; bronchitis, 35; pneumonia, 74; phthisis, 97.

Brooklyn.—Week ended March 1: Total deaths, 224; annual ratio, 20.63. Eighty-two cases of scarlet-fever, nine deaths; 26 cases of diphtheria, nine deaths. Croup caused nine deaths; acute pulmonary diseases, 54; phthisis, 36.

Buffalo.—Week ended March 1: Total deaths, 38; annual ratio, 14. Scarlet-fever caused three deaths; enteric-fever, three; croup, four.

Rochester.—Month ended March 1: Total deaths, 103; annual ratio, 14. Diphtheria caused 12 deaths; acute pulmonary diseases, 10. One case of small-pox; the patient came direct from Havana, where the disease is prevalent, and was taken sick on the first day after his arrival at Rochester.

Pittsburgh.—Week ended March 1: Total deaths, 51; annual ratio, 18. Enteric-fever caused two deaths; diphtheria, two; acute pulmonary diseases, 16.

Baltimore.—Week ended March 1: Total deaths, 145; annual ratio, 20.38. Enteric-fever caused one death; scarlet-fever, three; diphtheria, six; whooping-cough, two; acute pulmonary diseases, 36; phthisis, 21.

District of Columbia.—Week ended March 1: Total deaths, 93; annual ratio, 30. Scarlet-fever caused four deaths; diphtheria, one; acute pulmonary diseases, 20; phthisis, 11.

Hudson County, N. J.—Week ended March 1: Total deaths, 70; annual ratio, 19.2. Diphtheria caused three deaths; scarlet-fever, one; acute lung diseases, 9; phthisis, 6.

Philadelphia.—Week ended March 1: Total deaths, 308; annual ratio, 19.5. Enteric-fever caused eight deaths; scarlet-fever, nine; diphtheria, six.

Richmond.—Week ended March 1: Total deaths, 29; annual ratio, 19.1. Scarlet-fever caused three deaths; enteric-fever, one; pneumonia, six; phthisis, three.

Chicago.—Week ended March 1: Total deaths, 107; annual ratio, 12. Scarlet-fever caused seven deaths; diphtheria, five; enteric-fever, three.

Louisville.—Two weeks ended March 1: Total deaths, 108; annual ratio, 17.5. Diphtheria caused two deaths; scarlet-fever, one; enteric-fever, three; acute lung diseases, 27.

Savannah.—Two weeks ended February 28: Total deaths, 38, (nine whites, 29 colored;) annual ratio for whole population, 35. Diphtheria caused one death; enteric-fever, one; diarrhœa, three.

Mobile.—Week ended March 1: Total deaths, 11; annual rate, 15. No deaths from zymotic disease reported.

San Francisco.—Week ended February 21: Total deaths, 88; annual ratio, 15. Diphtheria caused three deaths; acute pulmonary diseases, 12; phthisis, 11.

Harana.—Week ended March 1: Yellow-fever caused five deaths; small-pox, ten.

Pernambuco.—Four weeks ended February 6: Total deaths, 462; annual ratio, 47.5. Small-pox caused 127 deaths; yellow-fever, seven.

Rio de Janeiro.—January 18 to 31: Total deaths, 429; annual ratio, 44. Yellow-fever caused 41 deaths; small-pox, 26; "pernicious" fever, 20. Yellow-fever prevails extensively among the shipping.

Montreal.—Three weeks ended February 22: Total deaths, 215; annual ratio, 31. Small pox caused 38 deaths; diphtheria, nine. Small-pox has been very prevalent, causing 728 deaths in the last year, but is now diminishing under the efficient system of vaccination recently introduced.

Great Britain.—Two weeks ended February 15: The average death rate in the twenty-three large towns was 27.5. Small-pox caused 37 deaths in London, 49 in Dublin.

Official reports of European medical-officers in China show conclusively that true "bubonic plague" has prevailed extensively in that Empire during the thirty years preceding 1873, when it was supposed to be wholly extinct. The reports also show, that owing to the meagre facilities for communication with central Asia, virulent epidemics may ravage extensive districts of that country, without knowledge of their

existence extending to Europe. The reports present records of the disease having prevailed in the province of Yunnan, to which it seems to have been introduced from Burmah, during twenty of the thirty years in question, varying in intensity in different parts of the province, and in different years. The appearance of the disease was coincident with the breaking out of the rebellion against the Imperial government, which was longer maintained, and suppressed with more violent measures, in Yunnan, than in any of the other provinces; conditions which undoubtedly contributed greatly to its virulence, as did also the superstitious practice of refusing to bury the dead, who are exposed on a bier to the sun till completely decomposed. The plague was very prevalent in Yunnan in 1871-'2-'3, and, in the latter year, suddenly reappeared in Mesopotamia and Persia, gradually extending its area until, in 1877, it reached the shores of the Caspian Sea, prevailing especially at the town of Resteh, which has a direct trade with Astrakan. In May and November, 1877, a fever, of intermittent type, accompanied with glandular swellings, prevailed in the port of Astrakan, and in Wetlyanka, and other villages of that province; and in November, 1878, a similar affection again appeared at Wetlyanka. Few deaths had occurred up to this time; but about December 1, the disease assumed the malignant character that has marked the present outbreak. The report of the Russian Medical Service of the Interior, for 1877, which has just been made public, announces that 241 cases of Siberian plague were reported to the Government during the year, the mortality being twenty-one per cent. The principal outbreaks occurred in the provinces of Viatka and Tchernigow, which are at a considerable distance from each other, and were contemporaneous with, or occurred soon after, the virulent prevalence of the disease in Persia.

From the above facts, which have been obtained from official sources, and are, in the main, well attested, it seems proper to conclude that, instead of the late outbreak being due to the spontaneous regeneration of the virus of the plague in the valley of the Volga, or, at the farthest, in Persia, the disease was reintroduced from China into Persia, and thence to Russia, local conditions in each instance probably favoring its development. Of these conditions no authentic account will be obtained until the international commission of experts, who are visiting the infected district, make their report. The return of cold weather, combined with the stringent measures adopted by the Government, seem to have confined the late violent outbreak to the limited district where it first appeared. The American ministers to Austria and to Russia report that the disease has manifested such an extremely viru-

lent and contagious character that great alarm exists in the whole of Eastern Europe, and urge upon the Government the necessity of taking measures to prevent the possibility of the introduction of the disease into the United States. The measures already taken by this Government* for preventing the importation of goods from the infected districts, except under proper precautions, are, for the present, considered sufficient for this purpose, especially if the ports of entry are kept free from the unsanitary conditions that favor the spread of epidemic disease.†

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

* The following circular shows the action referred to:

Regulations to prevent the introduction of the "plague" into the United States.

1879.

DEPARTMENT NO. 34.
Marine-Hospital Service.
 No. 1, Series 1879.

TREASURY DEPARTMENT,
Office of the Surgeon-General, U. S. M.-H. S.,
Washington, D. C., March 3, 1879.

To Officers of the Customs Revenue, Medical Officers of the Marine-Hospital Service, and others whom it may concern:

The act approved April 29, 1878, entitled "An act to prevent the introduction of contagious or infectious diseases into the United States," provides that no vessel coming from any foreign port or country where any contagious or infectious disease exists, nor any vessel conveying infected merchandise, shall enter any port of the United States or pass the boundary line between the United States and any foreign country except in such manner as may be prescribed under said act.

Attention has been called to the prevalence of a dangerous epidemic disease in Southern Russia, known as the plague, and its extremely virulent and contagious character, as manifested in the late outbreak, leaves no doubt that it is similar to, if not identical with, the "plague" which devastated the old world in past centuries.

Because, therefore, of the danger which attaches to rags, furs, &c., as carriers of infection, the following regulations are framed, under the direction of the Secretary of the Treasury, and subject to the approval of the President, for the protection of the health of the people of the United States against the danger referred to:

Until further orders, no vessel from any port of the Black Sea, or the Sea of Azof, conveying any rags, furs, skins, hair, feathers, boxed or baled clothing or bedding, or any similar articles liable to convey infection, nor any vessel from any port of the Mediterranean or Red Seas having on board such articles coming from Southern Russia, shall enter any port of the United States until such articles shall have been removed from the vessel to open lighters, or to some isolated locality, and the vessel disinfected and thoroughly ventilated; and the suspected articles shall be disinfected, either by chemical agents and exposure to free currents of air, or by burning, as shall be determined in each case by the Surgeon-General of the Marine-Hospital Service.

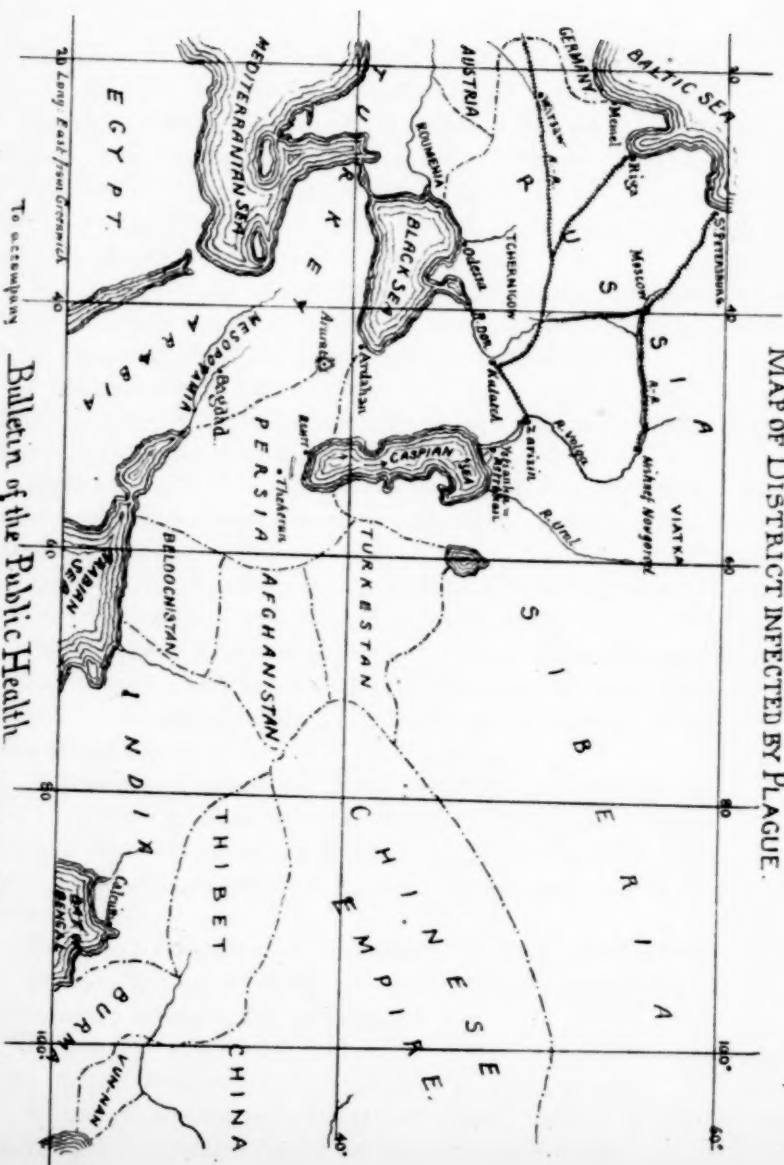
The certificate of the State or municipal quarantine officer of health may be accepted as satisfactory evidence of compliance with these regulations on the part of the vessel.

JNO. M. WOODWORTH,
Surgeon-General, U. S. M.-H. S.

Approved:
 R. B. HAYES.

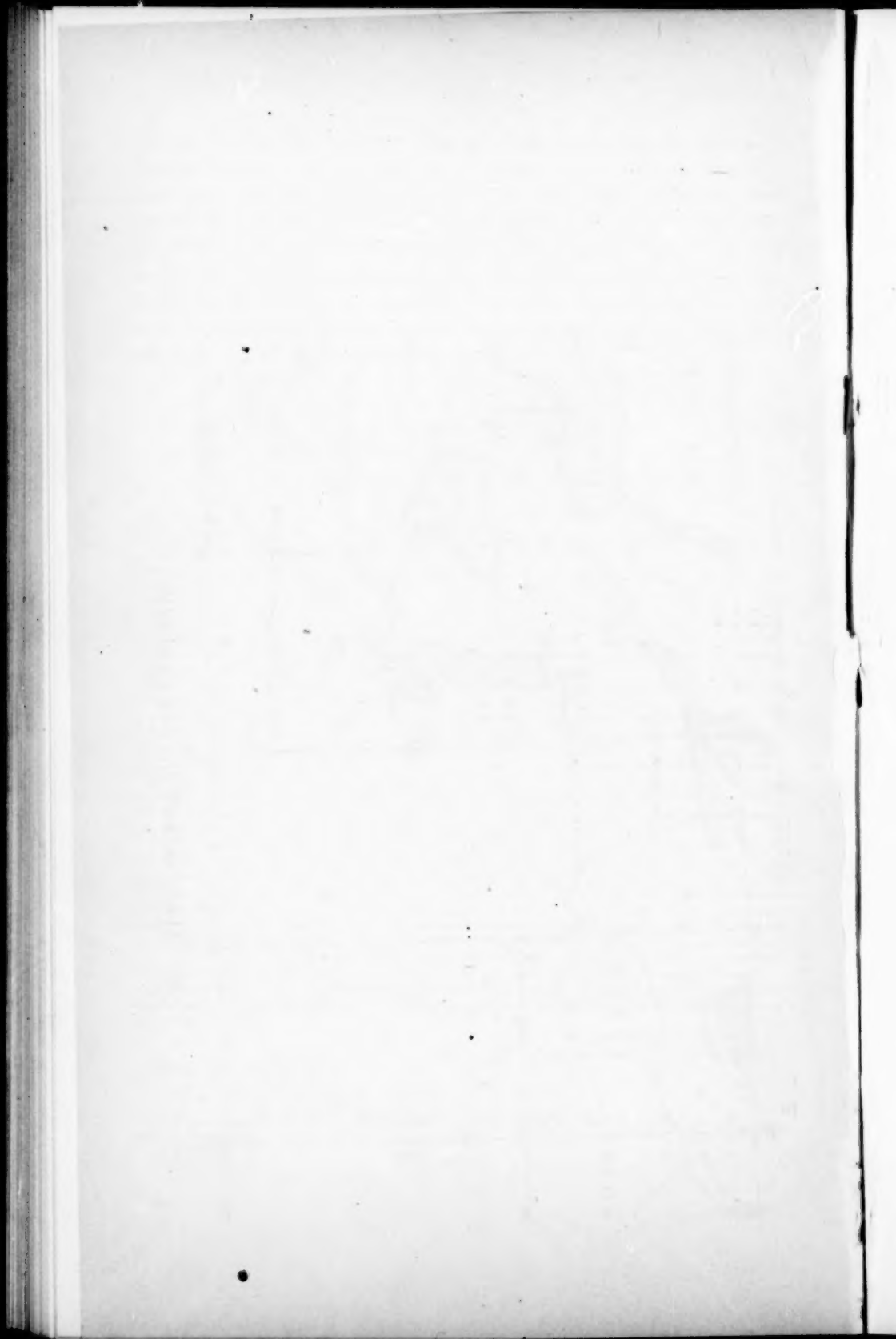
† See accompanying map. The points at which plague has prevailed in late years are underscored.

MAP OF DISTRICT INFECTED BY PLAGUE.



To accompany Bulletin of the Public Health

March 5, 1899.



OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, March 12, 1879.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended March 8, 1879.

Boston.—Week ended March 8: Deaths from all causes, 162; an annual ratio of 23 per 1,000 of the population. Thirteen cases of scarlet-fever, three deaths; 11 cases of diphtheria, five deaths; enteric-fever caused three deaths; pneumonia and bronchitis, 26; phthisis, 34.

Providence.—Week ended March 8: Total deaths, 37; annual ratio, 19.2. Scarlet-fever caused three deaths; diphtheria, two; acute pulmonary diseases, seven; phthisis, six.

New York.—Week ended March 8: Total deaths, 555; annual ratio, 26.5. Diphtheria caused 15 deaths; croup, 14; scarlet-fever, 60; acute lung diseases, 105; whooping-cough, 17; phthisis, 85.

Brooklyn.—Week ended March 8: Total deaths, 229; annual rate, 21.09. Seventy-nine cases of scarlet-fever, 19 deaths; 42 cases of diphtheria, five deaths; acute lung diseases, 43.

Hudson County, N. J.—Week ended March 8: Total deaths, 71; annual ratio, 19.5. Scarlet-fever caused seven deaths; diphtheria, two; acute lung diseases, 10.

Buffalo.—Week ended March 8: Total deaths, 33; annual ratio, 12. Scarlet-fever caused 12 deaths; diphtheria, three.

Philadelphia.—Week ended March 8: Total deaths, 311; annual ratio, 18.4. Scarlet-fever caused 10 deaths; diphtheria, nine; enteric-fever, seven; acute lung diseases, 42. "Health of city improving; pulmonary diseases diminishing."

Pittsburgh.—Week ended March 8: Total deaths, 60; annual ratio, 21.5. Enteric-fever caused three deaths; diphtheria, six.

Baltimore.—Week ended March 8: Total deaths, 140; annual ratio, 20. Diphtheria caused five deaths; scarlet-fever, seven; acute lung diseases, 26.

District of Columbia.—Week ended March 8: Total deaths, 77; annual ratio, 25. Scarlet-fever caused four deaths; diphtheria, one; acute pulmonary diseases, 28; phthisis, 11.

Richmond.—Week ended March 8: Total deaths, 38; annual ratio, 25. Scarlet-fever caused two deaths.

Savannah.—Week ended March 7: Total deaths, 16, (four whites, seven colored;) annual ratio for whole population, 30.

Cleveland.—Week ended March 8: Total deaths, 52; annual ratio, 16.7. Scarlet-fever caused two deaths; diphtheria, 4.

Louisville.—Week ended March 8: Total deaths, 45; annual ratio, 14. One death from zymotic disease, (enteric-fever,) 15 from acute lung diseases.

Saint Louis.—Week ended March 8: Total deaths, 108; annual ratio, 11. One death from enteric-fever, one from diphtheria.

San Francisco.—Week ended February 28: Total deaths, 88; annual ratio, 16.4. Diphtheria caused two deaths; acute lung diseases, 12; phthisis, 22.

New Orleans.—Two weeks ended March 9: Total deaths, 164; annual ratio, 20. Malarial fevers caused two deaths; acute lung diseases, 31; phthisis, 28.

Havana.—Week ended March 8: Yellow-fever caused two deaths; small-pox, eight.

The reported prevalence of yellow-fever, or of some disease closely related to it, at various points in the Southern States, is not substantiated by any reliable evidence; but, on the contrary, careful inquiries made by health officers show that the state of the public health throughout the South during the past season has differed from that of corresponding seasons only in the greater prevalence of acute affections of the respiratory organs.

Great Britain.—Week ended February 22: Average mortality in the twenty-three large towns, 26 per 1,000; being 21 in Edinburgh, 24 in Glasgow, 24 in London, 36 in Liverpool, 38 in Dublin, 39 in Manchester. Whooping-cough prevailed with marked fatality in London, Manchester, and Sheffield. Small-pox caused 82 deaths in London during the past four weeks, and 353 cases of the disease were under treatment in the hospitals on February 22. Small-pox caused 16 deaths in Dublin during the week.

The Spanish government has established quarantine for all vessels coming from Brazil, on account of the prevalence there of yellow-fever and small-pox.

Asiatic cholera has not prevailed at any of the ports of Morocco since December 1, and clean bills of health are issued to all vessels; but at Mogador, a malignant form of diarrhœa is very prevalent, and has caused great mortality among the natives, on account of their unsanitary mode of life. No accurate statement of mortality can be obtained, as the recording of deaths is in conflict with the Mohammedan tenets of faith.

The Governor of Astrakan announces, officially, that the late virulent outbreak of the plague in that province has expired within the district included in the military cordon. The number of deaths at Wetlyanka

was 600. The normal population of this village was 1,700, and almost every person who had not fled before becoming infected, was attacked by the disease and died. There is no announcement of the orders having yet been carried out for the burning of the infected places. The restriction of the disease to the original limits has been greatly favored by the natural isolation of the infected places, and the slight traffic existing in the district, the inhabitants but rarely leaving their villages, especially during the winter. Since the beginning of the outbreak, the principal road through the province has been obstructed, and all travel has been compelled to take a wide detour through the steppes. Strict quarantine regulations have been established at all the ports of the continent for vessels and goods coming from the Black Sea, and at the British ports the sanitary condition of all vessels arriving thence is carefully inspected.

The sanitary condition of most of the cities of Eastern Europe is being improved, in view of the possible extension of the plague on the advent of warm weather.

For the Surgeon-General:

J. B. HAMILTON,
Surgeon, U. S. M.-H. S.

No. 36.

OFFICE SURGEON-GENERAL, U. S. M.-H. S.,
Washington, March 19, 1879.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended March 15, 1879.

Boston.—Week ended March 15: Deaths from all causes, 159; an annual ratio of 22.6 per 1,000 of the population. Sixteen cases of scarlet-fever, five deaths; 22 cases of diphtheria, four deaths; bronchitis caused 13 deaths; pneumonia, 18; phthisis, 32.

Providence.—Week ended March 15: Total deaths, 39; annual ratio, 20. Enteric-fever caused one death; scarlet-fever, one; diphtheria, three.

New York.—Week ended March 15: Total deaths, 604; annual ratio, 28.8. Scarlet-fever caused 54 deaths; diphtheria, 12; enteric-fever, four; pneumonia, 81; bronchitis, 28; whooping-cough, 16; phthisis, 104.

Brooklyn.—Week ended March 15: Total deaths, 239; annual ratio, 22. Eighty-two cases of scarlet-fever, 17 deaths; 25 cases of diphtheria, 14 deaths; croup caused six deaths; bronchitis, 11; pneumonia, 34.

Rochester.—Week ended March 15: Total deaths, 53; annual ratio, 30. Small-pox caused one death; scarlet-fever, one. No case of small-pox in the city at present.

Pittsburgh.—Week ended March 15: Total deaths, 54; annual ratio, 12.5. Enteric-fever caused one death; scarlet fever, one; diphtheria, five.

Baltimore.—Week ended March 15: Total deaths, 135; annual ratio, 19. Enteric-fever caused three deaths; scarlet-fever, seven; diphtheria, four; bronchitis, 11; pneumonia, 13.

District of Columbia.—Week ended March 15: Total deaths, 91; annual ratio, 29.5. Enteric-fever caused one death; scarlet-fever, one; acute lung diseases, 25.

Cleveland.—Week ended March 15: Total deaths, 69; annual ratio, 22. Enteric-fever caused one death; scarlet-fever, two deaths; diphtheria, two deaths.

Chicago.—Week ended March 15: Total deaths, 156; annual ratio, 17.8. Enteric-fever caused two deaths; scarlet-fever, five; diphtheria, 13.

Cincinnati.—Week ended March 15: Total deaths, 112; annual ratio, 21. Typhus-fever caused one death; scarlet-fever, 18; diphtheria, three; whooping-cough, four.

Hudson County, N. J.—Week ended March 15: Total deaths, 72; annual ratio, 19. Scarlet-fever caused five deaths; diphtheria, one; enteric-fever, two; acute lung diseases, 16.

Buffalo.—Week ended March 15: Total deaths, 36; annual ratio, 13. Scarlet-fever caused four deaths; diphtheria, five; croup, three deaths.

Philadelphia.—Week ended March 15: Total deaths, 284; annual ratio, 17. Enteric-fever caused six deaths; scarlet-fever, 12; diphtheria, five; croup, five; acute lung diseases, 38.

Richmond.—Week ended March 15: Total deaths, 33; annual ratio, 21.7. Scarlet-fever caused three deaths.

Savannah.—Week ended March 14: Total deaths, 13; (five whites, eight colored.) Death rate for whole population, 27.

Louisville.—Week ended March 15: Total deaths, 43; annual ratio, 14. Scarlet-fever, enteric-fever, diphtheria, each caused one death; croup, two; acute lung diseases, nine deaths.

Saint Louis.—Week ended March 15: Total deaths, 102; annual ratio, 17.1. Six deaths from enteric-fever, 12 from scarlet-fever, five from diphtheria, five from croup, 38 from acute lung diseases.

San Francisco.—Week ended March 7: Total deaths, 74; annual ratio, 12.6. Diphtheria caused two deaths; acute lung diseases, 6; phthisis, 20.

New Orleans.—Week ended March 9: Total deaths, 87; annual ratio, 21. "Congestive malignant fevers" caused two deaths; acute lung diseases, 17.

Havana.—Week ended March 15: Yellow-fever caused one death; small-pox, 18.

Montreal.—Week ended March 8: Total deaths, 63; annual ratio, 27.2. Small-pox caused nine deaths; diphtheria, three; enteric-fever, one death.

Great Britain.—Week ended March 1: The average mortality in the twenty-three large cities was 27 per 1,000 of the population. Rate at London, 25.5; Edinburgh, 23; Glasgow, 29; Dublin, 43; Liverpool, 34; Plymouth, 18; Brighton, 18; Bristol, 19. Small-pox caused 22 deaths in London, one in Manchester, and 19 in Dublin.

Paris.—Week ended February 27: Total deaths, 1,026; annual ratio, 26.8. Small-pox caused 14 deaths; enteric-fever, 25 deaths.

German Empire.—Week ended February 22: In one hundred and fifty towns, the average death rate was 27.7. Rate at Munich, 33.4; Dresden, 23.3; Berlin, 23; Hamburgh, 29; Cologne, 28; Frankfort, 18.4; Strasburgh, 36.5; Leipzig, 26.

Vienna.—Week ended February 22: Total deaths, 432; annual ratio, 30.5. Small-pox caused 19 deaths; diphtheria, 14.

Saint Petersburg.—Week ended February 15: Total deaths, 615; annual ratio, 47.7. Small-pox caused 41 deaths; fevers, 44.

The United States Consul-General at Constantinople reports that the health of that city and its precincts, is in a favorable state, and that the reported occurrence of cases of plague in European Turkey have arisen from the prevalence of malignant typhus in the provinces devastated by the late war. The retreat of the Turkish armies was attended by great privation among the refugees who accompanied them, and among the inhabitants of the provinces through which they passed. Much distress and sickness have ever since prevailed there; but no authenticated cases of plague have occurred. No new cases of the plague have occurred in the province of Astrakan, but the military cordons are still maintained; the infected villages are being thoroughly cleansed, and means taken to completely exterminate the disease. Much anxiety is felt, however, lest on the breaking up of the ice in the Volga, and the liberation of the innumerable small craft that have been frozen up at Astrakan and other points, the disease may be spread by their movements. The past winter was the mildest in the memory of the inhabitants, and it is feared that the virus of the disease may survive the influence of the few short periods of cold weather that have occurred.

The bark "Sleipner" arrived at Port Eads, below New Orleans, on March 14, from Rio de Janeiro. During the sixty-one days passage all of the crew suffered from yellow-fever; three died, and one is still sick. The vessel was immediately towed to the quarantine station.

J. B. HAMILTON,
Surgeon, U. S. M. H. S.

No. 37.

Bulletin of the Public Health, issued from the office of the Surgeon-General, United States Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended March 22, 1879.

CITIES.	Total deaths.	Annual rate per 1,000 of population.	Deaths from—					
			Diphtheria.	Scarlet-fever.	Enteric fever.	Acute lung diseases.	Phthisis.	
New York	623	30.6	14	65	1	112	89	Whooping-cough caused 26 deaths.
Philadelphia	278	16.7	7	12	4	34	48	
Brooklyn	208	19.16	*12	18	2	37	25	
St. Louis	114	12.0	2	.....	2	13	20	
Chicago	138	15.6	12	4	4	24	12	
Boston	147	21.0	18	§3	1	21	23	
Baltimore	147	21.0	4	6	1	28	26	{ Measles, 2. Whooping-cough, 6. Cer. spinal fever, 2. Erysipelas, 2.
Cincinnati	116	21.5	6	18	2	20	10	
District of Columbia ..	77	25.0	1	5	1	29	12	{ "Pneumonia and infantile convul- sions prevalent.
Pittsburgh	42	15.0	4	3	2	7	3	
Buffalo	35	13.0	6	4	.....	1	6	{ Cer. spinal fever, 3. Croup, 4. Erysipelas, 1.
Cleveland	51	16.4	2	1	.....	11	4	
Newark	67	27.9	3	2	2	6	15	
Providence	30	15.6	1	.....	1	4	8	{ "Public health better than usual at this season."
Richmond	25	16.45	.....	2	.....	3	4	Whooping-cough, 1.
New Haven	26	22.5	1	1	.....	.....	.....
Portland, Maine	13	19.0	1	.....	.....	1	3	
Savannah	17	31.5	.....	.....	.....	2	4	{ Whites, 7 deaths. Colored, 10 deaths.
Total for week	2154	20.2	84	134	23	352	312	
San Francisco, week ended Mar. 14.	83	14.4	5	1	1	11	10	{ Cerebro-spinal fever, 2. Croup, 4.
New Orleans, week ended Mar. 16.	84	20.8	1	.....	.....	18	17	{ "Diseases of air passage preva- lent."
Montreal, week ended Mar. 15	71	31.0	12	.....	1	.....	7	Small-pox, 12.

*Thirty-seven cases.

†Ninety-six cases.

‡Fourteen cases.

§Thirteen cases.

Bermuda.—In a population of 15,300, there was but *one* death (from old age) during the two weeks ended March 11. Two cases of yellow-fever in hospital.

Havana.—Week ended March 22: Small-pox caused 11 deaths; yellow-fever, one. During the month of February, the total deaths were 632, an annual rate of 42 per 1,000 of the population. Diarrhœal diseases caused 70 deaths; small-pox, 45; yellow-fever, 13; malarial fevers, 16; enteric-fever, 10; diphtheria, seven.

Great Britain.—Week ended March 8: In the twenty-three large cities the average death rate was 29 per 1,000. Rate in Oldham, 43; Dublin, 36; Manchester, 33; Liverpool, 30; London, 29; Sheffield, 29; Glasgow, 21; Edinburgh, 19; Plymouth, 19. Small-pox caused 17 deaths in London, 11 in Dublin; scarlet-fever was very prevalent, and measles excessively fatal in several towns.

Paris.—Week ended March 6: One thousand and sixty deaths; rate, 27. Enteric-fever caused 29 deaths.

German Empire.—Week ended March 1: In one hundred and forty-nine towns, the average death rate was 28.1 per 1,000. Rate in Munich, 34; Strasburgh, 34; Dresden, 30; Breslau, 28; Cologne, 28; Ham-burgh, 26; Berlin, 25.7; Frankfort, 23. The whole number of deaths were 4,093, of which measles caused 28; scarlet-fever, 62; diphtheria, 161; whooping-cough, 63; enteric-fever, 61; phthisis, 590; acute lung diseases, 506.

Vienna.—Week ended March 1: Deaths, 438; rate, 31. Small-pox caused six deaths.

Saint Petersburg.—Week ended February 22: Deaths, 620; rate, 48. Small-pox caused 56 deaths; fevers, 49. The Imperial order directing the burning of the infected houses at Wetlyanka has been executed in part, and extraordinary powers have been conferred on the Governor of the district, under which vigorous efforts are being made to improve its sanitary condition. The towns adjoining the infected district, as well as the cities of Saint Petersburg and Moscow, are taking measures against the possible extension of the disease on the approach of warm weather, by cleansing and disinfection of unsanitary quarters, issuing of cooked food to the poor, erection of temporary buildings for the reception of refugees from the infected districts, and furnaces for burning infected clothing.

J. B. HAMILTON,

Acting Surgeon-General, U. S. M.-H. S.

No. 38.

*Bulletin of the Public Health, issued from the office of the Surgeon-General,
United States Marine-Hospital Service, under the National Quarantine
Act of 1878.—Week ended March 29, 1879.*

CITIES.	Total deaths.	Annual rate per 1,000 of population.	Deaths from—					
			Diphtheria.	Scarlet-fever.	Enteric-fever.	Pneumonia and bronchitis.	Phthisis.	
New York	557	26.6	8	54	8	98	93	Whooping-cough caused 25 deaths.
Philadelphia	309	17.8	12	10	10	37	61	
Brooklyn	209	19.2	18	111		41	25	{ Whooping-cough, 2. { Croup, 4.
Saint Louis	107	11.0	4		1	26	12	Erysipelas, 2.
Chicago	148	16.7	18		3	18	15	{ Cerebro-spinal fever, 2. { Whooping-cough, 3.
Boston	142	20.2	7	3	3	22	25	
Baltimore	149	21.2	2	4	2	27	29	{ Croup, 4. { Erysipelas, 2. { Whooping-cough, 3.
Cincinnati	76	14.1	5	8	1	15	11	{ Cerebro-spinal fever, 2. { Erysipelas, 3.
Hudson Co., N. J.	65	17.7	6	5		12	10	
Cleveland	56	17.9	3			8	7	{ Cerebro-spinal fever, 2. { Erysipelas, 1.
District of Columbia ..	83	27.0	2	1	1	21	13	{ Cerebro-spinal fever, 1. { Remittent-fever, 3. { Erysipelas, 1.
Louisville	40	13.0				7	12	Erysipelas, 1.
Pittsburgh	45	16.0	1		2	11	6	Cerebro-spinal fever, 1.
Buffalo	34	12.4	4	3		1	6	{ Croup, 5. { Cerebro-spinal fever, 2.
Newark	74	30.8	4		2	9	8	Diarrheal disease, 5.
Milwaukee	47	22.0	6			2	6	Erysipelas, 1.
Providence	37	19.2	1	3	1	6	6	Croup, 4.
Richmond	30	20.0	2			4	4	Cerebro-spinal fever, 1.
Mobile	15	20.0			1	5	3	
Portland	7	10.0	1				1	
Savannah	16	26.0				4	3	
Total for week	2244	<i>Average.</i> 19.3	104	101	35	364	356	
New Orleans, week ended March 23	105	26.0	2		1	13	25	
San Francisco, week ended March 21	64	10.9	3		1	4	12	

* Thirty cases. † Seventy cases. ‡ Whites, 19.6; colored, 41.4. § Whites, 18; colored, 34.

Montreal.—Week ended March 22: Total deaths, 83; annual rate, (corrected by estimate of United States Consul-General,) 28.8. Small-pox caused 12 deaths; diphtheria, three; enteric-fever, one; phthisis, nine.

Havana.—Week ended March 29: Small-pox caused 19 deaths; yellow-fever, one.

Great Britain.—Week ended March 15: In twenty-three large cities, with an aggregate population of 8,503,000, the average death rate was 28 per 1,000. Rate in Dublin, 38; Nottingham, 37; Leicester, 34; Leeds, 34; Manchester, 33; London, 29; Liverpool, 29; Sheffield, 29; Birmingham, 27; Glasgow, 25; Brighton, 20; Edinburgh, 19. Whooping-cough was epidemic, and excessively fatal in several towns. The deaths from acute lung diseases steadily increased during the week preceding March 15, and, during the last two weeks of the period, caused 1,362 deaths in London, nearly one-third of the whole mortality. Small-pox caused 17 deaths in London; 18 in Dublin, during the week.

Paris.—Week ended March 13: Total deaths, 1,093; annual rate, 28.6. Small-pox caused 18 deaths; diphtheria, 22; enteric-fever, 40.

German Empire.—Week ended March 8: In one hundred and forty-nine cities, with a population of 7,539,574, there were 1,296 deaths; an average rate of 26.6 per 1,000. Rate at Berlin, 25.7; Dresden, 24.4; Munich, 28; Hamburg, 23.6; Cologne, 23.3; Frankfort, 25.

St. Petersburg.—Week ended March 1: Total deaths, 636; annual rate, 49.4. Small-pox caused 40 deaths; typhus and enteric-fevers, 35.

The United States Consul-General reports that an easier feeling prevails in regard to the possible revival of the plague, on account of the vigorous and efficient policy of the Russian government, which has adopted all possible measures for the extermination of the disease.

The rinderpest is prevalent in Bohemia, Roumania, in several provinces in Russia, and in European Turkey.

Two deaths from trichinosis recently occurred in Brooklyn, N. Y., the diagnosis being verified by an autopsy, and by microscopic examination of the ham partaken of by the patients.

J. B. HAMILTON,

Acting Surgeon-General, U. S. M.-H. S.

No. 39.

Bulletin of the Public Health, issued from the office of the Surgeon-General, United States Marine-Hospital Service, under the National Quarantine Act of 1878.—Week ended April 5, 1879.

CITIES.	Total deaths.	Rate per 1,000 of population.	Deaths from—					
			Diphtheria and croup.	Scarlet-fever.	Other fevers.	Pneumonia and bronchitis.	Phthisis.	
New York	534	25.4	22	0	7	108	22	{ Whooping-cough, 12. { Diarrheal diseases, 13. { Erysipelas, 3.
Philadelphia	286	16.5	11	10	7	33	50	{ Whooping-cough, 5. { Erysipelas, 3.
Brooklyn	229	21.1	10	13	2	48	36	Whooping-cough, 3.
St. Louis	97	10.1			4	20	14	Erysipelas, 2.
Chicago	138	15.6	12	12	11	14	15	{ Cerebro-spinal fever, 7. { Erysipelas, 6.
Boston	127	18.0	13	2	2	21	22	Diarrheal diseases, 6.
Baltimore	139	19.8	7	6	2	17	26	
Hudson Co., N. J.,	76	20.0	4	11	1	7	10	
Cleveland	51	16.3	6			6	7	
District of Columbia	72	23.3	3	2	2	12	12	
Louisville	41	13.3				2	10	
Pittsburgh	30	11.0	2		1	5	1	
Buffalo	32	11.6	6	5	5	1	7	Cerebro-spinal fever, 3.
Newark	77	32.0	3		1	21	14	{ "Forty per cent. of deaths caused by pulmonary disease."
Milwaukee	38	17.2	6		1	7	5	
Providence	27	14.0	2	2	1	4	6	{ "Health of city good for the sea- son."
Richmond	24	16.0		2		3	6	
Savannah	18	29.2		1	2	3	3	"City very healthy."
Total for week	2036	Avg. 19.0	107	66	49	332	332	
New Orleans, week ended Mar. 30	93	23.0			5	7	18	
San Francisco, week ended Mar. 28	78	13.3	3	1	1	6	12	

* Not received.

§ White, 18.1; colored, 33.7.

† Sixty-two cases.

|| White, 20.9; colored, 37.8.

‡ Including Jersey City and Hoboken.

Montreal.—Week ended March 29: Total deaths, 56; annual ratio, 19.4. Five deaths from small-pox; mortality greatly lessened.

Harana.—Week ended April 5: Small-pox caused 26 deaths, yellow-fever, four.

Rio de Janeiro.—For the five weeks ended March 1, the total deaths averaged 215 per week; an annual ratio of 37. During the five weeks, small pox caused 31 deaths; "pernicious" fever, 48; yellow-fever, 168

deaths. The latter disease has steadily increased during the period, and official information has been received that the statement of deaths published is probably far short of the actual number.

Pernambuco.—In the six weeks ended March 2, small-pox caused 144 deaths; yellow-fever, 18 deaths.

Bahia.—During February, small-pox caused 14 deaths; city otherwise healthy.

Great Britain.—Week ended March 22: The average death rate in twenty-three large towns was 28 per 1,000. Rate in Dublin, 34; Sheffield, 32; Manchester, 31; London, 30; Liverpool, 28; Glasgow, 25; Brighton, 23; Edinburgh, 16. Whooping-cough and measles were excessively fatal in several towns, and the deaths from acute lung diseases were still on the increase in London, causing 705 of the 2,085 deaths reported for the week. Small-pox caused 16 deaths in London and 14 in Dublin.

Paris.—Week ended March 20: Deaths, 1,108; annual rate, 29. Small-pox caused 15 deaths; enteric-fever, 29; diphtheria, 27.

German Empire.—Week ended March 15: In one hundred and forty-nine towns, the average death rate was 27.2; at Berlin, 24; Hamburgh, 27; Dresden, 26.5; Cologne, 25; Frankfort, 24.3; Munich, 32; Strasburgh, 38.

The rinderpest is extending in Bohemia.

Small-pox caused 58 deaths at Saint Petersburg; 15 at Vienna; 13 at Buda Pesth; three at Geneva.

At the last advices from Bombay, Calcutta, and Madras, fevers were very prevalent, and small-pox caused numerous deaths in each city.

The Surgeon-General of the United States Navy has furnished the following facts in regard to the recent outbreak of yellow-fever on the United States steamer "Plymouth." On November 7, last, four cases of yellow-fever occurred on board the vessel while lying in the harbor of Santa Cruz; these were removed to hospital on shore and the ship sailed for Norfolk. Three mild cases occurred during the voyage, and the "Plymouth" was ordered to Portsmouth, N. H., thence to Boston. At the latter port everything was removed from the ship and all parts of the interior freely exposed to a temperature which frequently fell below zero, the exposure continuing for more than a month. During this time the water in the tanks, bilges, and in vessels placed in the storerooms was frozen. One hundred pounds of sulphur were burned below decks, this fumigation continuing for two days, and the berth-decks, holds, and storerooms were thoroughly whitewashed. On March 15, the ship sailed from Boston southward; on the 19th, during

a severe gale, the hatches had to be battened down and the berth-deck became very close and damp. On the 23d, two men showed decided symptoms of yellow-fever, and, on the recommendation of the surgeon, the vessel was headed northward. The sick men were isolated, and measures adopted for improving the hygienic condition of the vessel and crew. The Surgeon reported that he believed the infection to be confined to the hull of the ship, especially to the unsound wood about the berth-deck, all the cases but one having occurred within a limited area; and that while the "Plymouth" is in good sanitary condition for service in temperate climates, should she be sent to a tropical station, probably no precautionary measures whatever would avail to prevent an outbreak of yellow-fever.

J. B. HAMILTON,
Surgeon-General, U. S. M.-H. S.

No. 40.

TREASURY DEPARTMENT, WASHINGTON, D. C.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the Act approved April 29, 1878.—Week ending April 12, 1879.

Reports of the mortality in cities of the United States, for week ended April 12, 1879:

CITIES.	Total deaths.	Annual death rate.*		Deaths from—					
		From all causes.	From "zymotic" diseases.	Diphtheria and croup.	Scarlet-fever.	Other fevers.	Pneumonia and bronchitis.	Phtisis.	
New York.....	471	22.4	4.4	18	24	10	76	92	{ Puerperal diseases, 12. { Whooping-cough, 18. { Erysipelas, 5. { Small-pox, 1. { Erysipelas, 2. { Cerebro-spinal fever, 2. { Malarial-fever, 2. { Whooping-cough, 6. { Malarial remittent fever, 3. { Cerebro-spinal fever, 2.
Philadelphia.....	286	16.5	2.4	13	13	9	43	52	{ Whooping-cough, 2. { Cerebro-spinal fever, 2.
Brooklyn.....	216	19.9	3.3	11	14	3	48	44	{ Whooping-cough, 6. { Malarial remittent fever, 3. { Cerebro-spinal fever, 2.
Saint Louis.....	105	11.0	1.3	13	.....	9	11	18	{ Cerebro-spinal fever, 2.
Chicago.....	124	14.0	2.2	9	5	4	19	17	Cerebro-spinal fever, 2.
Boston.....	151	21.4	2.7	8	4	2	31	22	{ Whooping-cough, 2. { Cerebro-spinal fever, 2.
Baltimore.....	134	19.1	3.2	4	6	7	23	23	
Cincinnati.....	108	20.1	5.9	2	20	1	18	12	{ Whooping-cough, 2. { Erysipelas, 3.
Hudson Co., N. J.,†	60	15.7	1.6	4	3	1	7	4	

*Per 1,000 of population.

†Croup.

‡Including Jersey City and Hoboken.

Reports of the Mortality, &c., for week ended April 12, 1879—Continued.

CITIES.	Total deaths.	Annual death rate. ^a		Deaths from—						
		From all causes.	From "zymotic" diseases.	Diphtheria and croup.	Scarlet-fever.	Other fevers.	Pneumonia and bronchitis.	Phthisis.		
Cleveland	66	21.2	1.6	2	1	1	16	6		
Dist. of Columbia..	82	26.6	2.8	3	2	1	4	20	{ Death rate for whites, 22.5. " " " colored, 34.6.	
Louisville	50	16.2	1.9	2	.....	4	9	13	
Pittsburgh	52	18.6	2.5	4	1	1	4	10	Whooping-cough, 1.	
Buffalo	23	8.4	4.3	4	.....	5	5	6	Malarial-remittent fever, 3.
Newark	54	22.4	3.3	14	2	2	9	5		
Milwaukee	46	20.8	4.9	8	1	2	5	5		
Providence	37	19.2	4.5	2	5	1	3	3	Cerebro-spinal fever, 1.	
Richmond	41	27.0	4.0	1	5	5	5	8		
New Haven	14	12.1	1.7	.....	.....	.....	1	4	Whooping-cough, 1.
Portland, Maine ..	10	14.4	.....	.....	.....	.....	2	1	
Savannah	12	19.5	1.7	.....	1	.....	1	.....	{ Death rate for whites, 15. " " " colored, 24.
Nashville	13	25.0	.....	.....	.....	.....	.....	3	
Total for week ..		2,155	<i>Average.</i> 18.5	2.9	102	106	68	340	368	
San Francisco, week ending April 4...	64	10.9	0.8	3	2	1	4	15	Whooping-cough, 1.	
New Orleans, week ending April 6...	67	16.6	1.0	.....	.....	.....	6	22	Diarrhœal diseases, 4.

* Per 1,000 of population.

† Croup.

The returns received for the week represent a total population of 6,060,000.

"Zymotic" diseases caused 344 of the 2,155 deaths reported.

"The mortality for the week reported was the lowest ever known to the board of health of New Orleans. The city is in a very healthy condition."

The first death from small-pox in New York during the present year occurred on April 6; the patient being an unvaccinated Bohemian child.

One case of small-pox was reported in Baltimore, April 12.

The bark "May Queen" arrived below Baltimore, April 10, from Rio de Janeiro. On the passage all of the crew were sick, and two died; probably from yellow-fever. The vessel was detained at quarantine, and the usual sanitary measures were instituted.

Harana.—During the week ended April 12, small-pox caused 30 deaths; yellow-fever, two deaths.

At *Rio de Janeiro* yellow-fever prevails extensively among the shipping, and careful sanitary observation of all vessels arriving therefrom at southern ports is recommended.

Montevideo.—The United States consul reports the city free from infectious diseases, and the annual death rate about 22 per 1,000.

Great Britain.—Week ended March 29: In the twenty-three large cities of the United Kingdom the deaths numbered 4,540; an average annual rate of 28 per 1,000 of the population, being the same rate as for the two preceding weeks. In Dublin, the death rate was 33; London, 30; Manchester, 30; Sheffield, 29; Birmingham, 26; Liverpool, 26; Portsmouth, 23; Bristol, 23; Brighton, 18. Of the 2,078 deaths in London, 203 resulted from the principal zymotic diseases—whooping-cough causing 85; scarlet-fever, 32; other fevers, 22; measles, 29; diarrhoea, 18; diphtheria, eight. Acute lung diseases were still excessively fatal, and caused one-third of the whole number of deaths. The deaths from small-pox decreased to nine, and the number of cases in hospital to 291. In Dublin, the deaths from small pox increased to 17.

For Belfast, the death rate was 42; Waterford and Galway, 48; Limerick, 35; Cork, 20.

Paris.—Week ended March 27: Total deaths, 1,199; annual ratio, 31.3. Small-pox caused 10 deaths; enteric-fever, 29; diphtheria, 27.

German Empire.—Week ended March 27: In one hundred and forty-seven towns the total deaths were 3,999, an average rate of 27.9 per 1,000. Of the total deaths, measles caused 30; scarlet-fever, 62; diphtheria, 149; whooping-cough, 51; phthisis, 665; acute lung diseases, 509. For Berlin the death rate was 27; Breslau, 30.6; Munich, 39.3; Dresden, 23; Hamburgh, 23; Cologne, 31.5; Frankfort, 30; Strasburgh, 42.2. The general death rate and the character of the prevailing diseases were not essentially changed from those of the preceding week.

Vienna.—Week ended March 27: Total deaths, 508; annual rate, 35.8. Small-pox caused 10 deaths; diphtheria, 28.

Saint Petersburg.—Week ended March 15: Total deaths, 622; annual rate, 48.3. Small-pox caused 49 deaths; typhus and enteric-fevers, 41.

During February, cholera caused about twenty deaths per week at Calcutta; and small-pox and fevers were very fatal in that city, and in Madras and Bombay.

One new case of plague, not fatal, has been reported on the Lower Volga, but there was no extension of the disease. The district still remains under martial law, and a permanent sanitary service is to be organized by the Government, with special commissioners, for the inspection of the fishing-places, who will have power to destroy the decayed fish liable to accumulate, and to disinfect the vessels and utensils employed. If a fresh outbreak of the disease should occur, the people will be removed from their houses to tents, where separation of the sexes will be maintained.

The quarantines established by the European governments are being generally modified so far as to apply only to persons and goods coming from the immediate vicinity of the infected district.

Typhus-fever prevails extensively around the borders of the Black Sea and the Levant, and in the interior of Russia, especially in the province of Viatka, where it was introduced by Turkish prisoners, and disseminated by the movements of the peasantry and of travelling mendicants. The principal means of propagation was by infected clothing. In one district twenty-six villages, within a circle of a few miles, suffered severely, the mortality amounting to nearly fifty per cent. of the sick. More females suffered from the disease than males, on account, probably, of being more exposed to the vitiated air of the confined houses, and to the local unsanitary conditions, the men being engaged in out-door occupations elsewhere. Scarlet-fever, small-pox, and diphtheria prevailed in the same districts, and the latter disease caused an excessive mortality, especially among children, in various parts of the Empire during the past year. In many districts, from ten to twenty per cent. of the inhabitants suffered from the affection, and nearly fifty per cent. of those attacked died. In small hamlets, with a population of less than 1,000, the deaths numbered from 50 to 100. The disease increased in virulence as it spread from one village to another, and its extension was undoubtedly influenced by the bad sanitary conditions of the populace and the scarcity of physicians which prevail in all the rural districts of Russia. Measures have been taken by the Government to check the spread of the disease by the appointment of sanitary commissioners and of additional physicians, and by the general disinfection of the inhabitants and isolation of the sick in the infected districts.

No. 41.

TREASURY DEPARTMENT, WASHINGTON, D. C.

*Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the Act approved April 29, 1878.—
Week ended April 19, 1879.*

Reports of the mortality in cities of the United States, for week ended April 19, 1879:

CITIES.	Total deaths.	Annual death-rate.*		Deaths from—					
		From all causes.	From "zymotic" diseases.	Diphtheria and croup.	Scarlet fever.	Other fevers.	Pneumonia and bronchitis.	Phthisis.	
New York.....	512	24.4	5.3	16	55	3	88	79	{ Diarrhœal diseases, 10. Cerebro-spinal fever, 2. Small-pox, 1. Puerperal diseases, 12. Whooping-cough, 9. Erysipelas, 4. Erysipelas, 3. Cerebro-spinal fever, 1. Enteric fever, 11. Whooping-cough, 2.
Philadelphia.....	334	19.2	2.3	9	12	12	50	55	{ Whooping-cough, 7.
Brooklyn.....	204	19.0	4.8	18	16	.....	55	44	{ Whooping-cough, 7.
St. Louis.....	99	10.3	1.0	3	.....	5	27	13	
Chicago.....	135	15.2	2.7	16	9	2	9	19	Cerebro-spinal fever, 2.
Boston.....	138	19.6	2.2	7	2	2	28	30	{ Whooping-cough, 2. Erysipelas, 1.
Baltimore.....	133	18.9	2.8	8	5	6	18	21	{ Malarial-remittent fever, 2. Cerebro-spinal fever, 1.
Cincinnati.....	84	15.6	4.2	2	12	3	13	10	{ Whooping-cough, 4. Erysipelas, 1.
Hudson Co., N. J.†	70	18.4	3.5	3	7	2	8	2	Cerebro-spinal fever, 1.
Cleveland.....	62	20.0	2.5	3	3	.....	13	6	Malarial-remittent fever, 2.
Dis't of Columbia..	90	29.2	4.5	6	1	4	21	12	{ Whooping-cough, 2. Malarial-remittent fever, 2. Death-rate for whites, 21.5. " " " colored, 44.3.
Louisville.....	44	14.3	1.0	1	.....	2	6	10	
Pittsburgh.....	46	16.5	2.8	2	.....	1	7	3	{ Measles, 2. Malarial-remittent fever, 1. Whooping-cough, 1.
Buffalo.....	30	11.0	3.6	6	.....	3	4	5	Cerebro-spinal fever, 1.
Newark.....	53	22.0	1.6	.....	3	8	11	9	
Milwaukee.....	26	11.7	1.3	3	.....	.....	4	.....	"City exceedingly healthy."
Providence.....	44	22.8	3.1	3	1	1	7	6	
Richmond.....	27	17.7	2.6	.....	3	.....	.....	4	Measles, 1.
New Haven.....	15	13.0	.....	.....	.....	.....	4	1	
Memphis.....	24	26.5	4.4	.....	.....	3	5	6	Malarial-remittent fever, 2.
Mobile.....	9	11.7	2.6	.....	1	.....	1	.....	Diarrhœa, 1.
Portland, Maine...	8	11.5	.....	.....	.....	.....	2	2	
Savannah.....	11	18.0	6.5	.....	.....	4	2	1	{ Puerperal-fever, 2. Death-rate for whites, 3. " " " colored, 34.
Nashville.....	9	21.4	1.9	.....	.....	.....	.....	2	Diarrhœa, 1.
Total for week, 2,207		Average.							
		18.8	3.2	106	130	61	382	340	
San Francisco, week ended April 11...	77	13.1	1.3	5	.....	2	5	8	{ Cerebro-spinal fever, 1. Whooping-cough, 1.
New Orleans, week ended April 13...		89	23.9	1.7	3	1	4	16	Diarrhœal diseases, 3.

* Per 1,000 of population.

† Jersey City and Hoboken.

The returns received for the week represent a total population of 6,151,000.

"Zymotic" diseases caused 386 of the 2,207 deaths reported.

In New York there was one death from small-pox, being the second from that cause during the present year.

The mortality of Philadelphia and Providence was materially increased, probably on account of the inclement weather prevailing.

Numerous cases of measles were reported at Pittsburgh.

In Baltimore, there were 16 decedents of the average age of 79½ years; 38 per cent. of the deaths in that city were of children under five years of age.

The Savannah board of health report that "the city continues very healthy."

The board of health of Memphis report "pneumonia and malarial fevers prevalent."

The city physician of Vicksburgh reports "health of city remarkably good"—11 deaths during past two weeks.

The bark "Midas," from Rio de Janeiro, arrived at Boston April 18, and was placed under observation, and subjected to the usual sanitary measures at quarantine for a few days, most of the crew having been sick, and three having died at Rio de Janeiro and on the passage, from a disease reported by the captain to be yellow-fever.

The commissioners appointed by the Governor of New York for securing the extermination of contagious pleuro-pneumonia have prohibited the transportation of live cattle within the State, except by permission of the proper authorities; and the authorities of New Jersey having declared the eastern counties of that State to be infected with the disease, importations of cattle from thence into the State of New York have been prohibited, except for purposes of slaughter.

ABSTRACT OF REPORTS FROM FOREIGN COUNTRIES.

Montreal.—Week ended April 12: Total deaths, 82; annual ratio, 31.6. There were 19 deaths from zymotic diseases, of which small-pox caused seven; diphtheria, four; enteric-fever, three; phthisis caused 17 deaths; bronchitis and pneumonia, nine.

Havana.—Week ended April 19: Yellow-fever caused one death; small-pox, 22 deaths. During the month of March, the total deaths numbered 735; an increase of 103 over the number for the preceding month, being an annual ratio of 45.2 per 1,000. Of these deaths, small-pox caused 61; diarrhoeal diseases, 62; yellow-fever, six; "malarial fevers," 19; enteric-fever, five; diphtheria, two; pneumonia, 34; phthisis,

172. No deaths were reported from scarlet-fever, measles, or whooping-cough.

Bermuda.—Week ended April 15: In a population of 15,293, but one death occurred.

Great Britain.—Week ended April 5: In the twenty-three large cities of the United Kingdom the total deaths decreased to 4,420; an average annual rate of 27 per 1,000 of the living population. In Dublin the death rate was 32; Birmingham, 31; Manchester, 30; London, 28; Liverpool, 26; Glasgow, 26; Plymouth, 25; Sheffield, 23; Brighton, 22; Edinburgh, 21; Portsmouth, 20; Norwich, 13. The annual death rate from the principal zymotic diseases ranged from 0.5 to 7, and averaged three per 1,000 in twenty English cities. There was a material decline in the deaths from acute lung diseases.

Of the 1,958 deaths in London, 208 resulted from the principal zymotic diseases. Whooping-cough caused 78; measles, 43; scarlet-fever, 24; other fevers, 13; diphtheria, 10. The deaths from small-pox were increased to 17, but the number of cases remaining in hospital were diminished to 257. In Dublin, the deaths from small-pox decreased to nine, and the cases in hospital to 113. For Belfast the death rate was 42; Cork, 36; Limerick, 32; Waterford, 61. The recent high death rate of the Irish towns is probably due in part to the severity of the weather.

Paris.—Week ended April 3: Total deaths, 1,297; annual ratio, 33.9. Small-pox caused 32 deaths; enteric-fever, 39; measles, 29; diphtheria, 28; croup, 21. The average annual death rate, and the mortality from zymotic diseases, is generally somewhat greater in Paris than in London.

German Empire.—Week ended March 29: In one hundred and forty-nine towns the total deaths were 3,987; an average annual rate of 28 per 1,000. Of these, diphtheria caused 154; measles, 58; whooping-cough, 54; scarlet-fever, 50; enteric-fever, 51; acute lung diseases, 514; phthisis, 621. No deaths from small-pox reported in the Empire.

The death rate at Strasburgh was 41.6; Munich, 40; Cologne, 34.5; Breslau, 27.7; Dresden, 27.6; Hamburg, 25.4; Berlin, 23.8; Frankfort, 20.9.

St. Petersburg.—Week ended March 22: Total deaths, 659; annual ratio, 51. Small-pox caused 37 deaths; enteric and typhus-fevers, 46; scarlet-fever, 18.

The Department of State has received information that the plague appears to have been extirpated within the district where it lately prevailed, and that the German government have modified the quarantine regulations for Russian ships so far as to apply only to vessels coming from the Black Sea and the Sea of Azov.

The burning of sixty-seven of the infected houses condemned at Wetlyanka was completed during the past month.

The people of the district are resuming their usual pursuits of agriculture and fishing.

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J. B. HAMILTON,
Surgeon-General, U. S. M.-H. S.

No. 42.

TREASURY DEPARTMENT, WASHINGTON, D. C.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the act approved April 29, 1878.—Week ended April 26, 1879.

Reports of the mortality in cities of the United States, for the week ended April 26, 1879:

CITIES.	Total deaths.	Annual death rate.* Deaths from—						
		From all sources.	From "symptomatic" diseases.	Diphtheria and croup.	Scarlet-fever.	Other fevers.	Pneumonia and bronchitis.	Phthisis.
New York	479	22.8	3.9	14	46	21	101	99
Philadelphia	311	17.9	1.5	10	8	6	44	51
Brooklyn	241	22.1	2.3	6	12	3	39	36
St. Louis	96	69.5	0.6	4	1	4	13	15
Chicago	148	16.7	2.3	13	2	7	20	11
Boston	150	21.3	2.7	12	3	2	19	31
Baltimore	141	20.2	2.7	5	4	2	16	29
Cincinnati	121	22.4	4.8	3	18	2	9	25
Hudson Co., N. J.†	74	30.3	3.5	3	7	2	4	9
Cleveland	60	19.2	2.5	2	4	1	7	3
Dist. of Columbia ..	68	21.4	0.6	1	1	.....	12	15
Louisville	39	12.6	1.6	2	.....	1	3	6
Pittsburgh	50	17.9	1.7	4	.....	1	8	5
Buffalo .....	.....	.....	.....	.....	.....	.....	.....	.....
Newark	58	24.1	2.1	1	3	2	8	6
Milwaukee	52	23.5	4.5	10	.....	.....	9	5
Providence	38	19.7	1.5	1	2	.....	5	5

* Per 1,000 of population.

† Including Jersey City and Hoboken.

‡ Croup.

(Puerperal diseases, 11.
Whooping-cough, 14.
Erysipelas, 5.
Measles, 2.
Diarrhœal diseases, 4.
Erysipelas, 1.
Enteric-fever, 6.
Whooping-cough, 3.
Enteric-fever, 2.
Whooping-cough, 5.
Enteric-fever, 1.
Cerebro-spinal fever, 3.
Enteric-fever, 3.
Cerebro-spinal fever, 1.
Whooping-cough, 2.
Measles, 2.
Puerperal disease, 1.
Cerebro-spinal fever, 2.
Erysipelas, 2.
Whooping-cough, 3.
Diarrhœal diseases, 1.
Typho-malarial fever, 2.
Whooping-cough, 1.
Enteric-fever, 1.
Diarrhœal diseases, 1.
Death rate for whites, 17.
" " colored, 32.
Meningitis, cerebral, 3.
Enteric-fever, 1.
Measles, 4.
(No report.)
Diarrhœal diseases, 1.
Enteric-fever, 1.
Remittent-fever, 1.

Reports of the Mortality, &c., for week ended April 26, 1879—Continued.

CITIES.	Total deaths.	Annual death rate.*		Deaths from—					
		From all causes.	From "zymotic" diseases.	Diphtheria and croup.	Scarlet fever.	Other fevers.	Pneumonia and bronchitis.	Phthisis.	
Richmond	28	18.4	1.9	.....	2	1	3	6	Enteric-fever, 1.
New Haven	26	22.5	2.6	2	1	.....	2	4	
Memphis	20	22.1	.....	.....	.....	.....	6	5	
Mobile	15	19.5	.....	.....	.....	.....	1	4	
Portland, Maine	15	21.6	.....	.....	.....	.....	.....	5	Erysipelas, 1.
Savannah	8	13.5	1.6	.....	.....	2	1	2	{ White and colored not reported separately.
Springfield, Mass.	8	13.4	1.6	1	.....	.....	1	1	
Nashville	16	30.8	.....	1	.....	.....	3	7	{ Death rate for whites, 13.4.
New Bedford	10	19.2	.....	.....	.....	.....	1	1	{ " " " colored, 17.3.
<i>Average.</i>									
Total for week	2,272	19.5	2.3	95	114	57	329	381	
San Francisco, week ended April 18	85	14.4	0.5	2	.....	1	3	18	Cerebro-spinal fever, 1.
New Orleans, week ended April 20	98	24.2	1.7	2	.....	12	7	12	Diarrheal diseases, 12.

* Per 1,000 of population.

ABSTRACT OF REPORTS FROM FOREIGN COUNTRIES.

Matamoras.—The consul at Matamoras reports the city and country for a radius of fifty miles unusually healthy, although the sudden changes of temperature cause much catarrhal disease among the poorer classes, who live in mud huts. Small-pox, he says, prevails the year round, but is no more regarded than measles with us. Yellow-fever is frequently imported, but as it is stated to be "unconstitutional" to establish a quarantine, either local or national, in Mexico, there seems to be no help for it. The fact that Brownsville, Texas, is on the opposite side of the river would seem to render the subject of quarantine at that port one of more than ordinary importance.

Havana.—Deaths since last report, up to and including the 28th instant, from yellow-fever, five; small-pox, 24—an increase since last report.

Pernambuco, Brazil.—For three weeks ended March 30, the following deaths are reported: Small-pox, 46; typhus-fever, four; yellow-fever, two; enteric-fever, two. The United States consul states that "encouraging reports come from Ceará; rains have fallen and purified the air, so that the pestilence may be considered at an end, although there are still a few isolated cases of small-pox."

Rio de Janeiro.—The Consul-General reports, under date of April 3,

175 deaths from yellow-fever during the previous four weeks; also the following deaths for same period: Pernicious fever, 41; enteric-fever, 16; small-pox, six; typhus-fever, two. The above deaths occurred in the city proper. Opposite the city, on the other side of the bay, the following cases of yellow-fever are reported to have been taken from ships in port, to "Hospital Santa Isabel," (Jurujuba:)

	Jan. 1 to Feb. 5.	Feb. 5 to Feb. 28.	Feb. 28 to March 7.	March 7 to March 15.
In hospital	4	77	62	76
Received	219	192	31	47
Died	49	59	6	20
Discharged	97	148	11	60
Remaining	77	62	76	43

The bark "Gamaliel," of Baltimore, which sailed for Baltimore on the 20th March, lost her captain; and the bark "Wm. W. Thomas," of Portland, which sailed on the 22d March, for Barbadoes, thence to a northern port, lost three men by death from yellow-fever, and one discharged sick with the same disease at this port. The summer season being practically over, a reduction in the death rate from yellow-fever is looked for.

Great Britain.—During the week ended April 12, there were registered in twenty-three large towns of the United Kingdom 4,020 deaths, being an average annual death rate of 25 per 1,000. The averages of twenty towns were: London, 26; Bradford, Oldham, and Manchester, 27 each; Wolverhampton, 29; Nottingham, Birmingham, and Liverpool, 24 each; Leeds, Bristol, and Hull, 23 each; Sunderland and Sheffield, 22 each; Salford, Newcastle-upon-Tyne, Brighton, and Leicester, 21 each; Portsmouth, 15; and the highest rate during the week, 32 in both Norwich and Plymouth. Measles prevailed in Norwich, Wolverhampton, and Newcastle-upon-Tyne; whooping-cough in Manchester and Leeds; scarlet-fever in Nottingham, Oldham, and Newcastle-upon-Tyne; enteric-fever in Portsmouth and Bradford. The 1,786 deaths in London include, from small-pox, 12; measles, 45; scarlet-fever, 19; diphtheria, 11; whooping-cough, 74; "fevers," 19; diarrhoea, 13—making 194 deaths from "zymotic" diseases against 203 and 208 for the two preceding weeks, and 62 below the average number for corresponding week for last ten years. In "Greater London," the deaths were 2,113, equal to annual rate of 24.3 per 1,000. The death rate in Glasgow was 22.9; Edinburgh, 19.8; Dublin, 27.8. Total

deaths for the week, in Dublin, 168; of these, 25 were from "zymotic" diseases, being the lowest number recorded since the end of November last; they include small-pox, four; scarlet-fever, five; measles, three; enteric-fever, three; whooping-cough, two.

Scotland.—The death rate in eight principal cities for week ended April 12, was 22.6 per thousand, and from zymotic diseases, 2.5.

Ghent.—Total deaths for month ended March 31, 1879, 357; annual average of 32.9.

Stockholm.—Population, 152,825. Total deaths for week ended 29th March, 58; annual death rate per thousand, 19.7.

Turkey.—The United States Consul-General at Constantinople reports, under date of April 4, that the International Sanitary Council at Pera have decided to continue quarantine measures for the present. Sporadic cases of plague were reported at Kirzlan, a port on the Caspian Sea. The condition of Roumelli is reported as "very much improved." He invites attention to the danger from the importation into the United States of carpets, rugs, and other woollen fabrics from Turkey. Many of them are old, and come from remote parts of Asia, Bokhara, Khoordistan, Afghanistan, and most frequently from Persia. "They are bought up by itinerant merchants from individuals who have had them in use probably for years, * * * such an occasion as the death of one or all the members of the family, causes the dispersion of their property, and among the rest their rugs and carpets. These articles are exported not only by merchants, but also by travelers, who take them to the United States as luggage, and thus escape the sanitary examination to which they would be subjected as merchandise. * * * I have forbidden traders in carpets to bring their wares to my house, for I suspect that some of the mysterious cases of plague at points quite remote from the original places of infection may have been transmitted by some such agent."

In this connection it may be noted that although in many parts of Persia the plague is endemic, goods from the infected districts are not destroyed by fire, as has been recently done in the infected districts on the Volga, but "they are sold, baled," and sent to Constantinople for export.

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J. B. HAMILTON,
Surgeon-General, U. S. M.-H. S.

No. 43.

TREASURY DEPARTMENT, WASHINGTON, D. C.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the Act approved April 29, 1878.— Week ended May 3, 1879.

Reports of the mortality in cities of the United States, for the week ended May 3, 1879:

CITIES.	Total deaths.	Annual death rate.*		Deaths from—						
		From all causes.	From "zymotic" diseases.	Diphtheria and croup.	Scarlet-fever.	Other fevers.	Pneumonia and bronchitis.	Phthisis.		
New York	543	25.9	3.8	20	52	7	82	90	{ Diarrheal diseases, 14. Whooping-cough, 14. Erysipelas, 4. Measles, 4.	
Philadelphia	319	18.4	1.2	12	8	2	31	62	{ Diarrheal diseases, 10. Erysipelas, 1. Cerebro-spinal fever, 1. Enteric-fever, 1. Whooping-cough, 1.	
Brooklyn	197	18.1	2.2	10	12	4	39	35	{ Diarrheal diseases, 5. Whooping-cough, 3. Remittent-fever, 3. Enteric-fever, 1.	
Saint Louis	87	9.0	0.6	3	.....	2	11	7	{ Diarrheal diseases, 1. Erysipelas, 1. Enteric-fever, 2.	
Chicago	125	14.1	2.6	15	7	1	15	13	{ Cerebro-spinal fever, 1. Erysipelas, 1.	
Boston	134	19.1	1.2	6	2	1	20	24	{ Diarrheal diseases, 1. Whooping-cough, 1. Enteric-fever, 1.	
Baltimore	100	14.0	1.5	4	5	2	12	28	{ Cerebro-spinal fever, 1. Erysipelas, 1.	
Cincinnati	100	18.6	5.7	5	25	1	17	16	{ Whooping-cough, 3. Enteric-fever, 1.	
Hudson Co., N. J. §	50	13.7	2.2	1	6	1	17	4	{ Whooping-cough, 3. Enteric-fever, 1.	
Cleveland .....	.....	.....	.....	.....	.....	.....	.....	.....	{ (No report.) Diarrheal diseases, 3. Erysipelas, 1.	
Dist. of Columbia ..	71	22.5	1.8	2	2	1	9	11	{ Enteric-fever, 1. Death rate for whites, 20.08. " " colored, 27.42.	
Louisville	41	13.3	3.2	7	1	3	3	.....	{ Enteric-fever, 3. Measles, 4.	
Pittsburgh	43	15.3	2.8	2	1	1	5	3	{ Enteric-fever, 1. Whooping-cough, 1.	
Buffalo	38	13.8	2.9	6	1	1	8	10	{ Cerebro-spinal fever, 1. Erysipelas, 1.	
Newark	64	26.6	3.3	4	3	2	4	9	{ Diarrheal diseases, 4. Remittent-fever, 2.	
Milwaukee	37	16.7	1.8	3	.....	.....	7	3	{ Erysipelas, 1. Erysipelas, 1.	
Providence	37	19.2	2.6	1	1	1	12	6	{ Enteric-fever, 1. Whooping-cough, 1.	
Richmond	25	16.4	1.9	.....	3	.....	13	2	{ Diarrheal diseases, 1. Enteric-fever, 3.	
New Haven	13	11.4	2.6	.....	.....	3	1	2	{ Enteric-fever, 3. Bronchitis, 1.	
Fall River	23	24.7	4.2	1	3	.....	1	5	{ Diarrheal, 1. Erysipelas, 1.	
Memphis	22	24.5	1.1	.....	.....	.....	13	5	{ Diarrheal diseases, 3. Enteric-fever, 1.	
Mobile	28	36.4	3.9	2	.....	2	.....	5	{ Remittent-fever, 1.	
Portland, Maine	10	14.4	.....	.....	.....	1	11	4		

* Per 1,000 of population. † Pneumonia. ‡ Diphtheria. § Including Jersey City and Hoboken.

Reports of the Mortality, &c., for the week ended May 3, 1879—Continued.

CITIES.	Total deaths.	Annual death rate.*		Deaths from—						
		From all causes.	From "zymotic" diseases.	Diphtheria and croup.	Scarlet-fever.	Other fevers.	Pneumonia and bronchitis.	Phthisis.		
Savannah.....	21	34.1	0.9	1	.....	2	†2	6	{ Death rate for whites, 9.1. " " " colored, 61.7. Cerebro-spinal fever, 1. Under five years, 6.	
Springfield, Mass..	10	16.5	4.9	.....	3	.....	†1	.....	
Nashville.....	16	30.8	.....	.....	.....	1	†1	5	{ Death rate for whites, 14.9. " " " colored, 60.3. Cerebro-spinal fever, 1.	
New Bedford.....	9	17.3	5.7	1	1	1	†2	1	Enteric-fever, 1.	
Norfolk.....	10	23.1	2.3	.....	.....	.....	†1	3	Measles, 1.	
Total for week...		Average.								
	2,173	18.5	2.4	106	136	40	288	359		
San Francisco, week ended April 25... }	87	14.8	1.0	3	1	2	11	14	{ Diarrhoeal diseases, 4. Enteric-fever, 2.	
New Orleans, week ended April 27... }	106	26.3	0.2	.....	.....	2	10	20	{ Diarrhoeal diseases, 9. Remittent-fever, 1.	

* Per 1,000 of population.

† Pneumonia.

The returns received for the week represent a total population of 6,119,380. Zymotic diseases caused 288 of the 2,173 deaths reported.

Charleston, S. C.—Quarantine enforced from and after May 1, 1879.

ABSTRACT OF REPORTS FROM FOREIGN COUNTRIES.

Hayti.—Saint Marc: The United States commercial agent reported to Minister Langston that the cook of the United States schooner "Frank Magee" died April 17, 1879, of yellow-fever. The diagnosis was verified by a post-mortem examination.

Port-au-Prince.—Minister Langston sends information that yellow-fever appeared in that place on the 30th. The steamer "Andes" left Port-au-prince, bound for New York, on the 1st instant.

Cuba.—Havana: The Consul-General reports three deaths from yellow-fever, and 19 from small-pox for the week ended May 3, 1879—a decrease since last report.

Montreal.—Week ended April 28, 1879: Total deaths, 83; of which, small-pox caused 9; diphtheria, three; and other zymotic diseases, 12.

Ottawa.—The General Council have prohibited, temporarily, the importation of American cattle.

Great Britain.—The death rate per 1,000, as shown by the Registrar-General's report for the twenty large towns, was as follows: Portsmouth, 15; Brighton, 19; Leicester, 20; Sunderland, 23; Nottingham, 23; Norwich, 24; Bradford, 24; Oldham, 24; London, 25; Sheffield, 25;

Bristol, 26; Newcastle-upon-Tyne, 26; Leeds, 26; Hull, 27; Wolverhampton, 27; Salford, 27; Birmingham, 28; Plymouth, 29; Manchester, 30; and Liverpool, 32. In London, small-pox caused 13 deaths out of a total of 1,757, while there has been only one fatal case from this disease in the nineteen provincial towns since the beginning of the year. Scarlet-fever is prevalent in Liverpool. An epidemic of enteric-fever recently occurred at Caterham and Redhill, England; the total number of cases was 342, and there were 21 deaths. The epidemic originated from the pollution of the water supplied by the Caterham Company becoming contaminated with the excreta of a single typhoid-fever patient.

Dublin.—Total deaths, 193; annual ratio, 31.9. The deaths from small-pox show a slight increase over the preceding week.

Belfast.—Total deaths, 101; annual ratio per 1,000, 24.7. The death rate in the eight principal towns of Scotland was 24.9 per 1,000.

New Zealand.—Auckland: Reports from the United States consul show that for the month of February, 1879, there were 17 deaths, of which 10 were of children under five years. The class of diseases treated at the "Provincial District Hospital" is as follows: Week ended March 15, 1879—Total treated: "zymotic," 22; "constitutional," 9; "local," 16; "developmental," 28; "violent," 9. Week ended March 22—Cases treated: "zymotic," 23; "constitutional," 9; "local," 19; "developmental," 28; "violent," 6. The population is not stated.

Africa.—Algiers and Suburb of Mustapha: Information from the United States vice-consul shows that the total deaths from February 2 to March 30, 1879, (eight weeks,) were 441—an annual rate of 40.2 per 1,000. Enteric-fever caused 27, and diphtheria nine of the deaths from zymotic diseases. None are reported to have occurred from small-pox or cholera.

Morocco.—Estimated population, 50,000; total deaths for the week ended January 11, 1879, 1,421—over two per cent. of the population.

Mogador.—Estimated population, 15,000; total deaths, week ended January 11, 1879, 371—nearly two and a half per cent. of the entire population.

Tangier.—The prevailing diseases are elephantiasis and other diseases of the skin, rheumatism, and phthisis pulmonalis; no record is kept of deaths from ordinary diseases. The cause of the high mortality in these towns, is reported to be the prevalence of famine, uncleanness, and want of confidence in foreign physicians, there being none of native extraction.

Turkey.—Constantinople: Consul-General Heap transmits a copy of a despatch from Dr. Mattiosian, the United States delegate to the In-

ternational Sanitary Council at Pera, by which it appears that the discussion of the origin, as well as the character of the plague, is still going on, some of the delegates maintaining the disease to be true Asiatic bubonic plague, and others an "inexplicable glandular engorgement;" in consequence of this divergence of opinion, the protocol releasing quarantine restrictions has not yet been signed. The epidemic has almost disappeared in Astrakan. The city of Constantinople is in a healthy condition.

Russia.—Saint Petersburg: Total deaths, 687; annual ratio, 53.3. Small-pox caused 42; typhus and typhoid-fevers, 42; and scarlet-fever, 11.

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J. B. HAMILTON.

Surgeon-General, U. S. M.-H. S.

No. 44.

TREASURY DEPARTMENT, WASHINGTON, D. C.

Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the Act approved April 29, 1878.—Week ended May 10, 1879.

Reports of the mortality in cities of the United States, for week ended
May 10, 1879:

CITIES.	Estimated population.	Total deaths.	Annual death rate.*		Deaths from—					
			From all causes.	From "zymotic" diseases.	Diphtheria and croup.	Scarlet-fever.	Other fevers.	Pneumonia and bronchitis.	Phtisis.	
New York	1,090,000	509	24.2	3.4	23	42	13	83	71	<div> <div>Diarrhœal diseases, 10.</div> <div>Erysipelas, 4.</div> <div>Cerebro-spinal fever, 2.</div> <div>Enteric-fever, 2.</div> <div>Whooping-cough, 21.</div> </div>
Philadelphia	901,380	296	15.9	1.6	14	9	9	29	48	<div> <div>Diarrhœal diseases, 9.</div> <div>Erysipelas, 6.</div> <div>Cerebro-spinal fever, 1.</div> <div>Enteric-fever, 8.</div> </div>
Brooklyn	565,000	175	16.1	1.2	8	3	3	17	26	<div> <div>Diarrhœal diseases, 3.</div> <div>Erysipelas, 2.</div> <div>Enteric-fever, 1.</div> <div>Whooping-cough, 1.</div> </div>
Saint Louis	500,000	85	8.8	0.6	1	.....	5	12	13	<div> <div>Diarrhœal diseases, 2.</div> <div>Measles, 2.</div> <div>Enteric-fever, 1.</div> <div>Erysipelas, 2.</div> </div>
Chicago	460,000	128	14.4	2.9	12	8	6	11	9	<div> <div>Diarrhœal diseases, 3.</div> <div>Erysipelas, 2.</div> <div>Cerebro-spinal fever, 2.</div> <div>Enteric-fever, 4.</div> </div>
Boston	365,000	123	17.5	0.9	5	.....	.....	17	20	<div> <div>Diarrhœal diseases, 4.</div> <div>Erysipelas, 2.</div> <div>Whooping-cough, 2.</div> </div>

* Per 1,000 of population.

Diphtheria.

Reports of the Mortality, &c., for week ended May 10, 1879—Continued.

CITIES.	Estimated population.	Total deaths.	Annual death rate.*		Deaths from—						
			From all causes.	From "zymotic" diseases.	Diphtheria and croup.	Scarlet fever.	Other fevers.	Pneumonia and bronchitis.	Phthisis.		
Baltimore	365,000	126	17.9	1.9	7	4	3	12	30	{ Erysipelas, 1. Cerebro-spinal fever, 1. Enteric-fever, 2.	
Cincinnati	280,000	83	15.4	3.5	14	13	2	7	14	{ Erysipelas, 2. Cerebro-spinal fever, 2. Whooping-cough, 2.	
Hudson Co., N. J. §	189,000	73	20.0	3.3	3	8	3	5	8	{ Diarrhœal diseases, 1. Enteric-fever, 1. Whooping-cough, 2.	
Dist. of Columbia	165,000	83	26.1	1.5	2	1	5	10	18	{ Diarrhœal diseases, 2. Death-rate for whites, 19.1. " " " colored, 40.1.	
Cleveland	162,000	51	16.3	0.9	2	1	...	9	7	{ Diarrhœal diseases, 1.	
Louisville	160,000	37	12.0	0.6	11	...	1	4	12	{ Diarrhœal diseases, 1.	
Pittsburgh	145,000	51	18.2	2.5	5	2	...	2	4	{ Diarrhœal diseases, 2. Measles, 2.	
Buffalo	143,000	35	12.7	2.1	4	...	2	4	5	{ Erysipelas, 1. Enteric-fever, 1. Cerebro-spinal fever, 1.	
Newark	125,000	56	23.3	2.9	1	3	3	8	6	{ Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 3.	
Milwaukee	115,000	30	13.6	2.1	5	...	...	...	3	{ Diarrhœal diseases, 3.	
Providence	100,000	32	17.1	3.1	3	1	2	3	2	{ Enteric-fever, 2.	
Richmond	79,000	41	26.9	1.9	...	2	1	5	7	{ Diarrhœal diseases, 1. Enteric-fever, 1.	
New Haven	60,000	12	10.4	4.3	1	...	2	3	...	{ Erysipelas, 2. Enteric-fever, 2.	
Charleston	57,000	26	24.5	0.8	1	...	...	1	5	{ Diarrhœal diseases, 4.	
Fall River	48,500	...	...	...	...	...	...	...	...	{ (No report.)	
Memphis	47,000	13	14.3	1.1	1	...	...	3	2	{ (No report.)	
Mobile	40,000	...	...	...	...	...	...	...	...	{ (No report.)	
Portland, Maine	36,000	...	...	...	...	...	...	...	...	{ (No report.)	
Savannah	32,000	16	26.0	...	...	...	2	3	4	{ Diarrhœal diseases, 2. Death-rate for whites, 15.2. " " " colored, 38.1.	
Springfield, Mass.	31,500	8	13.4	3.3	2	...	...	...	2	{ (No report.)	
Nashville	27,000	12	23.1	3.8	...	...	2	...	4	{ Enteric-fever, 2. Diarrhœal diseases, 1. Death-rate for whites, 17.6. " " " colored, 32.8.	
New Bedford	27,000	11	21.2	7.7	2	...	2	3	1	{ Enteric-fever, 2.	
Omaha	26,215	4	7.9	...	...	...	...	1	...	{ (No report.)	
Norfolk	23,000	7	15.8	2.2	...	...	1	...	...	{ Remittent-fever 1. Measles, 1.	
Average.											
Total for week	6,364,595	2,124	17.7	2.1	97	97	67	241	321		
San Francisco, week ended May 2	305,000	82	13.9	0.5	1	1	2	16	13	{ Diarrhœal diseases, 3. Enteric-fever, 2.	
New Orleans, week ended May 4	210,000	102	25.2	0.2	...	...	3	11	18	{ Diarrhœal diseases, 16. Enteric-fever, 1.	

* Per 1,000 of population.

† Diphtheria.

‡ Pneumonia.

§ Jersey City and Hoboken.

The returns received for the week represent a total population of 6,240,095.

Zymotic diseases caused 260 of the 2,124 deaths reported.

ABSTRACT OF REPORTS FROM FOREIGN COUNTRIES.

Canada.—Montreal: Total deaths, 62; of which, small-pox caused four; scarlet-fever, two.

Cuba.—Havana: Deaths from yellow-fever, four; small-pox, 15. For the month of April, the total deaths were 761, against 965 for the corresponding month of 1878. The reported deaths during the month include 13 from yellow-fever, 108 from small-pox, and 149 from phthisis.

Hayti.—Port-au-Prince: Yellow-fever exists in the city, and no bills of health are issued from that point.

Bermuda.—Total population, 15,293; week ended May 6, no deaths.

Brazil.—Total deaths for week ended April 5, 195; of which, small-pox caused one; yellow-fever, 42; and typhoid-fever, two. For the week ended April 12: Total deaths, 199; of which, yellow-fever caused 44; typhus and typhoid-fevers, each, one.

Great Britain.—England: The annual mortality rates per 1,000 in twenty towns—week ended April 26—as shown by the Registrar-General's report, were as follows: Bradford, 17; Portsmouth, 19; Brighton, 19; Wolverhampton, 21; Hull, 21; Leeds, 22; Nottingham, 22; Liverpool, 24; Bristol, 24; Sunderland, 25; Sheffield, 25; Oldham, 25; London, 26; Salford, 26; Newcastle-upon-Tyne, 27; Birmingham, 28; Norwich, 28; Manchester, 29; Plymouth, 29; and Leicester, 29. *Ireland*.—Dublin: Annual rate of mortality, 35; Belfast, 30; Cork, 32; Limerick, 20; Londonderry, 35; Waterford, 7; Galway, 40; Sligo, 33. *Scotland*.—Glasgow, 24.1; Edinburgh, 20.5; Dundee, 22.3; Aberdeen, 21.3; Greenock, 24.4; Paisley, 26.6; Leith, 28.0; Perth, 25.4. The State Department has received information that "vessels from Danish ports in the Baltic are now held exempt in British ports from quarantine regulations, provided they can show that they have not touched at Russian ports."

Italy.—Rome: The Minister of the Interior has decreed the abolition of quarantine on arrivals from Ottoman ports, and vessels on arrival from the Black Sea and Sea of Azof will be subjected to twenty-four hours' airing and disinfection at quarantine; but the interdiction of imports of rags, old clothes, and unwashed white goods remains unchanged.

Africa.—Tangier: The United States consul reports, under date of March 1, 1879, that an epidemic resembling typhus-gravior made its appearance in Tangier on the 7th of January, and that "in the interior it is of the most malignant character, sweeping entire villages; the country is desolate, and the ruin and distress is complete." The country has been inundated by frequent and heavy rains.

Seychelles.—Mahé: Population, 12,000. Total deaths from December 7, 1878, to February 1, 1879, 32.

Antwerp.—Week ended April 26: Total deaths, 95; annual ratio, 25.5. Small-pox caused six and typhoid-fever 10 of the reported deaths.

Turkey.—Constantinople: The city continues healthy; the latest advices from Astrakan state that the plague is now extinct, and the International Sanitary Council has dissolved. From Broussa it is reported that there has been a severe epidemic of diphtheria in two villages, which caused great ravages among the people of all ages. The hygienic condition of these towns is very bad, but the epidemic has been localized, and proper measures have been recommended by the Council to the local authorities. At Adrianople there have been numerous cases of typhus-fever and diphtheria, probably in consequence of the crowding together of immigrants.

Singapore.—Advices under date of March 28, report the city and adjacent country in a healthy condition.

In Calcutta, for the week ended March 22: Total deaths, 268; annual rate per 1,000, 32.5.

Bombay.—Week ended March 18: Total deaths, 429; annual ratio, 34.6.

Paris.—Week ended April 24: Total deaths, 1,171; annual ratio, 30.6.

Saint Petersburg.—Week ended April 12: Total deaths, 607; annual ratio, 47.2. Small-pox caused 62 deaths in Calcutta for the week stated, 15 in Bombay, 33 in Paris, and 27 in Saint Petersburg. The same disease caused 57 deaths in Madras for the two weeks ended March 14, out of a total number of 442 deaths.

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J. B. HAMILTON,
Surgeon-General, U. S. M.-H. S.

TREASURY DEPARTMENT, WASHINGTON, D. C.

*Bulletin of the Public Health, issued by the Surgeon-General, United States Marine-Hospital Service, under the Act approved April 29, 1878.—
Week ended May 17, 1879.*

Reports of the mortality in cities of the United States, for week ended May 17, 1879:

CITIES.	Estimated population.	Annual death rate.*		Deaths from—						
		Total deaths.	From all causes.	From "zymotic" diseases.	Diphtheria and croup.	Scarlet fever.	Other fevers.	Pneumonia and bronchitis.	Phthisis.	
New York	1,090,000	499	23.8	3.1	13	42	11	82	75	{ Diarrhœal diseases, 9. Erysipelas, 4. Enteric-fever, 3. Whooping-cough, 17. Measles, 4. Enteric-fever, 6. Cerebro-spinal fever, 5. Erysipelas, 1. Diarrhœal diseases, 3. Whooping-cough, 4. Enteric-fever, 1. Erysipelas, 4. Diarrhœal diseases, 3. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 2. Whooping-cough, 1. Enteric-fever, 1. Cerebro-spinal fever, 3. Erysipelas, 2. Enteric-fever, 2. Diarrhœal diseases, 2. Measles, 2. Erysipelas, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
Philadelphia	901,380	264	15.2	0.9	5	5	12	21	43	{ Enteric-fever, 6. Cerebro-spinal fever, 5. Erysipelas, 1. Diarrhœal diseases, 3. Whooping-cough, 4. Enteric-fever, 1. Erysipelas, 4. Diarrhœal diseases, 3. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 2. Whooping-cough, 1. Enteric-fever, 1. Cerebro-spinal fever, 3. Erysipelas, 2. Enteric-fever, 2. Diarrhœal diseases, 2. Measles, 2. Erysipelas, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
Brooklyn	565,000	179	16.4	1.8	7	8	4	26	26	{ Enteric-fever, 1. Erysipelas, 4. Diarrhœal diseases, 3. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 2. Whooping-cough, 1. Enteric-fever, 1. Cerebro-spinal fever, 3. Erysipelas, 2. Enteric-fever, 2. Diarrhœal diseases, 2. Measles, 2. Erysipelas, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
St. Louis	500,000	100	10.4	0.6	13	1	8	8	20	{ Enteric-fever, 1. Diarrhœal diseases, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 2. Whooping-cough, 1. Enteric-fever, 1. Cerebro-spinal fever, 3. Erysipelas, 2. Enteric-fever, 2. Diarrhœal diseases, 2. Measles, 2. Erysipelas, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
Chicago	460,000	138	15.6	2.8	12	10	5	13	11	{ Enteric-fever, 1. Cerebro-spinal fever, 3. Erysipelas, 2. Enteric-fever, 2. Diarrhœal diseases, 2. Measles, 2. Erysipelas, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
Baltimore	375,000	115	15.9	3.4	10	11	4	7	29	{ Enteric-fever, 2. Diarrhœal diseases, 2. Measles, 2. Erysipelas, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
Boston	365,000	121	17.2	1.2	2	3	2	19	22	{ Enteric-fever, 2. Diarrhœal diseases, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
Cincinnati	280,000	90	16.7	1.6	...	8	1	16	15	{ Enteric-fever, 2. Diarrhœal diseases, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
Hudson Co., N. J.†	189,000	77	21.1	3.0	2	6	3	16	13	{ Enteric-fever, 2. Diarrhœal diseases, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
Dist. of Columbia.	165,000	70	22.0	2.2	1	4	2	8	10	{ Enteric-fever, 2. Diarrhœal diseases, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
Cleveland	162,000	45	14.4	2.5	4	3	...	6	6	{ Enteric-fever, 2. Diarrhœal diseases, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
Louisville	160,000	46	14.9	0.9	...	1	2	15	14	{ Enteric-fever, 2. Diarrhœal diseases, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
Pittsburgh	145,000	38	13.6	0.7	...	...	2	2	5	{ Enteric-fever, 2. Diarrhœal diseases, 2. Whooping-cough, 1. Enteric-fever, 2. Diarrhœal diseases, 5. Whooping-cough, 1. Cerebro-spinal fever, 1. Erysipelas, 1. Diarrhœal diseases, 2. Enteric-fever, 2. Erysipelas, 1. Diarrhœal diseases, 2. Death rate for whites, 15.1. " " " colored, 35.4.
Buffalo	143,000	...	...	...	...	...	...	...	...	(No report.)
Newark	125,000	57	23.7	4.5	16	2	...	7	9	{ Enteric-fever, 1. Diarrhœal diseases, 4. Erysipelas, 2. Enteric-fever, 1. Cerebro-spinal fever, 1. Diarrhœal diseases, 1.
Milwaukee	115,000	33	14.9	5.4	10	1	2	12	3	{ Enteric-fever, 1. Diarrhœal diseases, 4. Erysipelas, 2. Enteric-fever, 1. Cerebro-spinal fever, 1. Diarrhœal diseases, 1.

*Per 1,000 of population. †Diphtheria. ‡Pneumonia. §Including Jersey City and Hoboken.

Reports of the Mortality, &c., for week ended May 17, 1879—Continued.

CITIES.	Estimated population.	Total deaths.	Annual death rate.*		Deaths from—					
			From all causes.	From "zymotic" diseases.	Diphtheria and croup.	Scarlet-fever.	Other fevers.	Pneumonia and bronchitis.	Phthisia.	
Providence	100,000	40	20.8	2.08	12	2	.....	16	7	
Rochester	90,000	29	16.7	.....	.....	.....	4	4	5	Cerebro-spinal fever, 3.
Richmond	79,000	.....	.....	.....	.....	.....	.....	.....	.....	(No report.)
New Haven	60,000	21	18.2	0.8	.....	.....	1	11	7	Enteric-fever, 1.
Charleston	57,000	24	21.8	.....	.....	.....	1	11	12	Diarrheal diseases, 3.
Fall River	48,500	.....	.....	.....	.....	.....	.....	.....	.....	(No report.)
Memphis	47,000	16	17.7	2.2	.....	.....	1	1	2	{ Enteric-fever, 1. Erysipelas, 1.
Mobile	40,000	.....	.....	.....	.....	.....	.....	.....	.....	(No report.)
Portland, Maine...	36,000	9	13.0	.....	.....	.....	1	.....	5	
Savannah	32,656	22	35.0	3.0	.....	1	.....	2	6	{ Death rate for whites, 30.0. " " " colored, 41.0.
Springfield, Mass..	31,500	8	13.2	3.3	.....	1	.....	.....	1	
Nashville	27,000	14	26.9	.....	.....	.....	.....	3	4	{ Diarrheal diseases, 1. Death rate for whites, 29.7. " " " colored, 21.8.
New Bedford	27,000	14	26.9	3.8	.....	.....	2	.....	3	Enteric-fever, 2.
Omaha	26,215	.....	.....	.....	.....	.....	.....	.....	.....	(No report.)
Norfolk	23,000	6	13.5	.....	.....	.....	.....	11	1	
Average.										
Total for week...	6,465,251	2,075	17.6	2.0	77	109	68	237	354	
San Francisco, week ended May 9	305,000	83	14.1	1.3	23	1	5	7	13	{ Diarrheal diseases, 2. Cerebro-spinal fever, 1.
New Orleans, week ended May 11	210,000	94	23.2	0.7	2	.....	2	5	9	{ Enteric-fever, 4. Enteric-fever, 1. Diarrheal diseases, 12.

* Per 1,000 of population.

† Pneumonia.

The returns received for the week represent a total population of 6,128,536. Zymotic diseases caused 244 of the 2,075 deaths reported.

ABSTRACT OF REPORTS FROM FOREIGN COUNTRIES.

Cuba.—Havana: Deaths from yellow-fever, week ended May 17, eight; small-pox, 20.

Hayti.—Port-au-Prince: Yellow-fever still prevails in the city, and is considered to be increasing. A fever, known as "La Mauvaise fever," is very prevalent, and many persons have died; but while it is said to be distinct from yellow-fever, it is even more feared by the people than the latter. Miragoane: The United States consular agent reports, through Minister Langston, that yellow-fever exists in the city,

and a large number of seamen have died. It is reported that out of twelve cases on board the Italian bark "Medora," "seven or eight" have died. One of the crew of the American schooner "Hattie M. Howes" died on the 3d instant, and the vessel sailed for New York, having on board another patient, who was convalescent.

The State Department has received information that the yellow-fever prevailed at Port-au-Prince fifteen years ago, but that since that period there has been no reappearance of the disease until now. In regard to the sanitary condition of Port-au-Prince, it is remarked by Minister Langston, that "the streets are constantly foul, and that not even police regulations of any sort are enforced." There is no regulation to oblige even the filthiest person to remove deposits from the streets, nor from the gutters or sidewalks in front of their doors, and "the harbor is also full of foul matter of every sort." The fact of the existence of this mass of putrefying animal and vegetable matter, in one of the hottest climates, taken in connection with the absence of yellow-fever from the city for the last fifteen years, furnishes presumptive evidence, at least, that deposits of filth alone, even when saturated with moisture and heated, are incapable of generating yellow-fever. The fever, which is apparently produced by the filth of the city, while quite fatal, is said to differ materially from yellow-fever in all essential particulars.

Brazil.—Santos: The United States consul reports through the State Department, under date of April 15, that sporadic cases of yellow-fever have recently occurred at that port, and several deaths have occurred; among them, a sailor, one of the crew of the bark "Cairo," of Philadelphia, on the 12th of April, and the captain of a British vessel (name not given) on the 19th. The brig "Ottawa," bound for "Bull River," and the steamer "Hipparchus," (Belgium,) cleared without "bills of health," the consul declining to give such bills for the present. He invites attention to the rain-fall of that district, as a probable factor in the varying degrees of violence in the epidemics of yellow-fever in the last eight years, the virulence of the epidemic being, in his opinion, in inverse ratio to the amount of flushing the streets received during the rains. In this connection it may be noted that, in Africa, in the regions of country affected by the typhus epidemic, the consuls have spoken of the very great rain-fall, the country having been inundated, the bridges washed away, and communication between the larger towns and the country, in many instances, suspended altogether.

Mortality Table for Foreign Cities.

PLACE.	DATE.		Population.	Annual rate per 1,000 from all causes.
	Week ended—			
London	May	3	3,620,868	23.8
Liverpool	May	3	538,338	23.7
Bristol	May	3	209,947	17.7
Leeds	May	3	311,860	18.6
Manchester	May	3	361,819	28.4
Birmingham	May	3	388,884	25.1
Sheffield	May	3	297,138	22.5
Bradford	May	3	191,046	23.5
Portsmouth	May	3	131,821	18.2
Brighton	May	3	105,608	21.7
Nottingham	May	3	169,396	20.6
Hull	May	3	146,347	22.8
Glasgow	May	3	578,156	27.5
Edinburgh	May	3	226,075	29.2
Dundee	May	3	150,923	19.8
Aberdeen	May	3	101,635	22.9
Greenock	May	3	76,955	25.1
Paisley	May	3	48,923	36.2
Leith	May	3	57,037	17.7
Perth	May	3	26,623	25.4
Dublin	May	3	314,666	31.0
Belfast	May	3	182,082	33.0
Cork	May	3	91,965	29.0
Limerick	May	3	44,209	39.0
Londonderry	May	3	30,884	32.0
Waterford	May	3	30,626	36.0
Galway	May	3	19,692	18.0
Sligo	May	3	17,285	21.0
Paris	May	1	1,988,806	29.5
Geneva	April	26	69,755	29.2
Brussels	April	19	175,782	37.7
St. Petersburg	April	19	669,741	53.0
Berlin	April	12	1,049,171	26.8
Hamburgh, (State)	April	19	417,239	28.0
Dresden	April	19	212,872	25.4
Breslau	April	26	270,000	31.4
Vienna	April	26	737,285	36.2
Munich	April	26	230,000	42.0
Buda Pesth	April	19	323,659	45.1
Amsterdam	April	19	308,952	27.0
Rotterdam	April	19	147,002	26.3
The Hague	April	19	111,016	32.0
Copenhagen	April	22	225,000	32.2
Stockholm	April	19	152,825	31.9
Christiania	April	26	112,977	15.2
Rome	Mar.	27	286,926	23.1
Naples	Mar.	22	458,614	33.5
Turin	April	12	231,647	28.8
Venice	April	19	140,637	24.1
Alexandria	April	17	212,034	32.5
Calcutta	Mar.	29	429,535	37.0
Bombay	Mar.	25	644,405	36.7
Madras	Mar.	21	397,552	34.0
Montevideo	Mar.	29	37,787	21.0

India.—Singapore: The city and adjacent country continued healthy up to April 12, 1879.

Published by direction of the Secretary of the Treasury:

J. B. HAMILTON,
Surgeon-General, U. S. M.-H. S.

No. 46.

TREASURY DEPARTMENT, WASHINGTON, D. C.

Bulletin of the Public Health, issued by the Surgeon-General United States Marine-Hospital Service, under the Act approved April 29, 1879.—Week ended May 24, 1879.

Reports of the mortality in the cities of the United States, for week ended May 24, 1879:

CITIES.	Estimated population.	Total deaths.	Annual death rate.*		Deaths from—										Pneumonia and bronchitis.	Pneumonia.	Diphtheria.
			From all causes.	From "zymotic" diseases.	Diphtheria and group.	Scarlet-fever.	Enteric-fever.	Other fevers.	Erysipelas.	Whooping cough.	Diarrhoeal dis- eases.	Pneumonia and bronchitis.	Pneumonia.				
New York.....	1,000,000	444	21.2	2.6	17	31	1	8	4	5	18	71	70	{ Measles, 2. Cerebro-spinal fever, 1. Cerebro-spinal fever, 2.			
Philadelphia.....	901,380	261	15.0	1.1	4	7	6	2	3	.....	4	26	44			
Brooklyn.....	565,000	152	13.9	1.7	11	8	.....	2	.....	5	1	21	24			
St. Louis.....	500,000	76	7.9	.3	.....	1	1	.....	1	.....	2	19	11			
Chicago.....	400,000	120	13.5	1.5	8	5	1	2	.....	1	2	9	17	Cerebro-spinal fever, 2.		
Baltimore.....	375,000	109	15.1	1.9	6	7	.....	2	1	1	1	4	22	Cerebro-spinal fever, 1.		
Boston.....	365,000	110	15.6	1.1	3	2	2	1	1	1	4	10	21	Cerebro-spinal fever, 1.			
Cincinnati.....	290,000	80	14.8	2.2	.....	12	.....	.....	.....	2	.....	18	15			
Hudson Co., N. J., (Jersey City and Hoboken).....	189,000	43	11.8	3.3	42	6	2	2	.....	1	1	4	8	Measles, 2.		
District of Columbia.....	165,000	57	17.9	1.8	.....	5	1	.....	.....	.....	.....	1	7	{ Death rate for whites, 13.24. Death rate for colored, 28.89.		
Cleveland.....	162,000	50	16.0	2.2	2	3	.....	.....	2	2	1	16	2			
Louisville.....	160,000	46	14.9	.....	.....	.....	.....	.....	.....	.....	.....	6	6	Diphtheria.		

* Per 1,000 of population.

* Per 1,000 of population.

Reports of the Mortality in Cities of the United States, for week ended May 24, 1879—Continued.

CITIES.	Estimated population.	Total deaths.	Annual death rate.*		Deaths from—										
			From all causes.	From "zymotic" diseases.	Diphtheria and croup.	Scarlet-fever.	Enteric-fever.	Other fevers.	Erysipelas.	Whooping-cough.	Diarrheal diseases.	Pneumonia and bronchitis.		Phthisis.	
Pittsburgh.....	145,000	46	16.4	2.1	4	.....	2	.....	.....	.....	1	1	2	6	Cerebro-spinal fever, 1.
Buffalo.....	143,000	37	13.4	3.6	6	2	.....	.....	.....	2	2	5	9	10	
Newark.....	125,000	36	14.9	2.4	5	.....	1	.....	.....	.....	.....	.....	14	5	
Milwaukee.....	115,000	23	10.4	.9	2	.....	.....	.....	.....	.....	.....	1	2	3	
Providence.....	100,000	30	15.6	3.1	1	3	2	.....	.....	.....	1	1	11	5	(No report.)
Rochester.....	90,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cerebro-spinal fever, 1.
Richmond.....	79,000	25	16.4	1.9	.....	1	2	1	.....	.....	.....	3	1	.....
New Haven.....	60,000	15	13.0	.8	.....	.....	1	.....	.....	.....	1	.....	1	2	
Charleston.....	57,000	28	25.5	.....	.....	.....	.....	.....	.....	.....	.....	1	11	6	
Fall River.....	48,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(No report.)
Memphis.....	47,000	18	19.9	.....	.....	.....	.....	.....	3	.....	.....	4	11	1	
Mobile.....	40,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(No report.)
Dayton, Ohio.....	37,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(No report.)
Portland, Maine.....	36,000	11	15.8	2.8	2	.....	.....	.....	.....	.....	.....	2	.....	2	{ Death rate for whites, 15.2.
Savannah.....	32,656	12	19.6	1.5	.....	1	.....	.....	.....	.....	.....	2	.....	2	{ Death rate for colored, 24.2.
Springfield, Mass.....	31,500	8	13.4	1.6	1	.....	.....	.....	.....	.....	2	.....	.....	1	{ Death rate for whites, 8.9.
Nashville.....	27,000	7	13.4	.....	.....	.....	.....	.....	1	.....	.....	1	11	1	{ Death rate for colored, 31.8.

ABSTRACT OF REPORTS FROM FOREIGN COUNTRIES.

Turkey.—Constantinople: The city and adjacent country continue healthy. Smyrna: Advices under date of April 21, transmitted through the Consul-General at Constantinople, state that a sanitary commission has been organized, (date not reported,) with reference to the prevention of the introduction of plague. Dardanelles: Advices received, under date of April 22, report the prevalence of scarlet-fever. The cattle "typhus," or "lung-plague," which last year destroyed seventy-five per cent. of the entire herds, has almost disappeared. It is said to have been introduced into the province by importation from Roumelia.

Africa.—Algiers: The death rates for the four weeks ended April 7, 14, 21, and 28, respectively, were 48.1, 32.9, 42.8, 26.9. No further information has been received regarding the progress of the typhus epidemic in Northern Africa.

Mortality Table for Foreign Cities.

PLACE.	DATE.	Population.	Annual rate per 1,000, from all causes.
	Week ended—		
London	May 10	3,620,868	22.4
Liverpool	May 10	538,338	22.3
Bristol	May 10	209,947	19.1
Leeds	May 10	311,860	24.1
Manchester	May 10	361,819	24.8
Birmingham	May 10	388,884	20.4
Sheffield	May 10	297,138	23.5
Bradford	May 10	191,046	16.7
Portsmouth	May 10	131,821	19.0
Brighton	May 10	105,608	15.8
Nottingham	May 10	169,396	21.6
Hull	May 10	146,347	19.6
Glasgow	May 10	578,156	23.0
Edinburgh	May 10	226,075	21.7
Dundee	May 10	150,923	20.5
Aberdeen	May 10	101,635	27.0
Greenock	May 10	76,955	23.0
Paisley	May 10	48,923	28.7
Leith	May 10	57,037	20.5
Perth	May 10	26,623	23.4
Dublin	May 10	314,666	32.0
Belfast	May 10	182,082	34.0
Cork	May 10	91,965	20.0
Limerick	May 10	44,209	33.0
Londonderry	May 10	30,884	20.0
Waterford	May 10	30,626	17.0
Galway	May 10	19,692	16.0
Sligo	May 10	17,285	27.0
Paris	May 8	1,988,806	29.4
Geneva	May 3	69,755	25.4
Brussels	April 26	175,782	29.7
Saint Petersburg	April 26	669,741	51.9
Berlin	April 19	1,049,171	27.2

Mortality Table for Foreign Cities—Continued.

PLACE.	DATE.	Population.	Annual rate per 1,000 from all causes.
	Week ended—		
Hamburgh, (State).....	April 26	417, 239	29. 0
Dresden	April 26	212, 872	21. 3
Breslau	May 3	270, 000	29. 3
Vienna	May 3	737, 285	33. 4
Munich	May 3	230, 000	44. 0
Buda Pesth	April 26	323, 659	42. 4
Amsterdam	April 26	308, 952	22. 6
Rotterdam	April 26	147, 002	26. 1
The Hague	April 26	111, 016	26. 7
Copenhagen	April 29	225, 000	26. 4
Stockholm	April 26	152, 825	28. 2
Christiania	May 3	112, 977	19. 3
Rome	April 5	286, 926	26. 6
Turin	April 19	231, 647	25. 5
Venice	April 26	140, 637	21. 5
Alexandria	April 24	212, 034	34. 4
Calcutta	April 5	429, 535	35. 1
Bombay	April 1	644, 405	37. 5
Antwerp	May 10	169, 981	31. 0

Canada.—Montreal: Total deaths, 64; of which small-pox caused four, and diphtheria three.

Cuba.—Havana: Deaths from yellow-fever, for the week ended May 24, were 12; and 35 occurred from small-pox, a marked increase in the mortality from the latter disease.

Spain.—Malaga: It is reported that wine adulterated with fuchsine (one of the aniline colors, which usually contains either antimony or arsenic) has been seized at the custom-house. The Spanish Government authorities have directed that all wine, before being admitted, shall be submitted to an analysis at the custom-houses at all ports of entry.

New Zealand.—Auckland: Total deaths for March, 1879, 23; of which, one was from cholera and two from typhoid-fever.

Published by direction of the Secretary of the Treasury :

J. B. HAMILTON,
Surgeon-General, U. S. M.-H. S.

Circular revoking the Regulations of March 3, 1879, to prevent the introduction of the "Plague" into the United States.

1879.
DEPARTMENT NO. 88.
Marine-Hospital Service.
No. 3, Series 1879.

TREASURY DEPARTMENT,
Office of the Surgeon-General, U. S. M.-H. S.,
Washington, D. C., May 31, 1879.

To Medical Officers of the Marine-Hospital Service, and others whom it may concern :

Official information having been received to the effect that the "plague," which existed in Southern Russia, is now almost extinct, the regulations issued March 3, 1879, imposing certain restrictions upon the importation of rags, &c., into the United States, are hereby revoked.

By order of the Secretary of the Treasury:

J. B. HAMILTON,
Surgeon-General, United States Marine-Hospital Service.

Approved:

R. B. HAYES.

Circular in reference to the Bulletin of the Public Health, &c.

1879.
DEPARTMENT NO. 87.
Marine-Hospital Service.
No. 4, Series 1879.

TREASURY DEPARTMENT,
Office of the Surgeon-General, U. S. M.-H. S.,
Washington, D. C., June 4, 1879.

The following extract of an act of Congress approved June 2, 1879, entitled "An act to prevent the introduction of contagious or infectious diseases into the United States," is hereby published for the information of all concerned:

* * * * *

"SEC. 9. So much of the act entitled 'An act to prevent the introduction of contagious or infectious diseases into the United States,' approved April 29, 1878, as requires consular officers or other representatives of the United States at foreign ports to report the sanitary condition of and the departure of vessels from such ports to the Supervising Surgeon-General of the Marine-Hospital Service; and so much of said act as requires the Surgeon-General of the Marine-Hospital Service to frame rules and regulations, and to execute said act, and to give notice to Federal and State officers of the approach of infected vessels, and furnish said officers with weekly abstracts of consular sanitary reports, and all other acts and parts of acts inconsistent with the provisions of this act, be, and the same are hereby, repealed."

By direction of the Secretary of the Treasury:

J. B. HAMILTON,
Surgeon-General, United States Marine-Hospital Service.

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